

**SONY®**

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VIDEOCASSETTE RECORDER

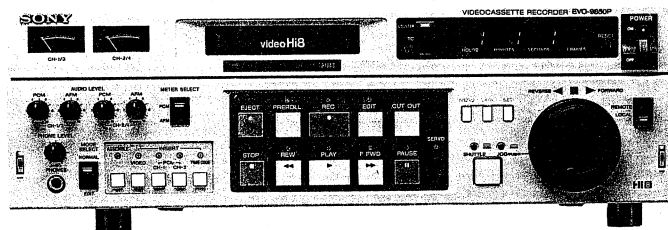
**EVO-9850P**

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**SERVICE MANUAL**

Vol. 2

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**Hi8**

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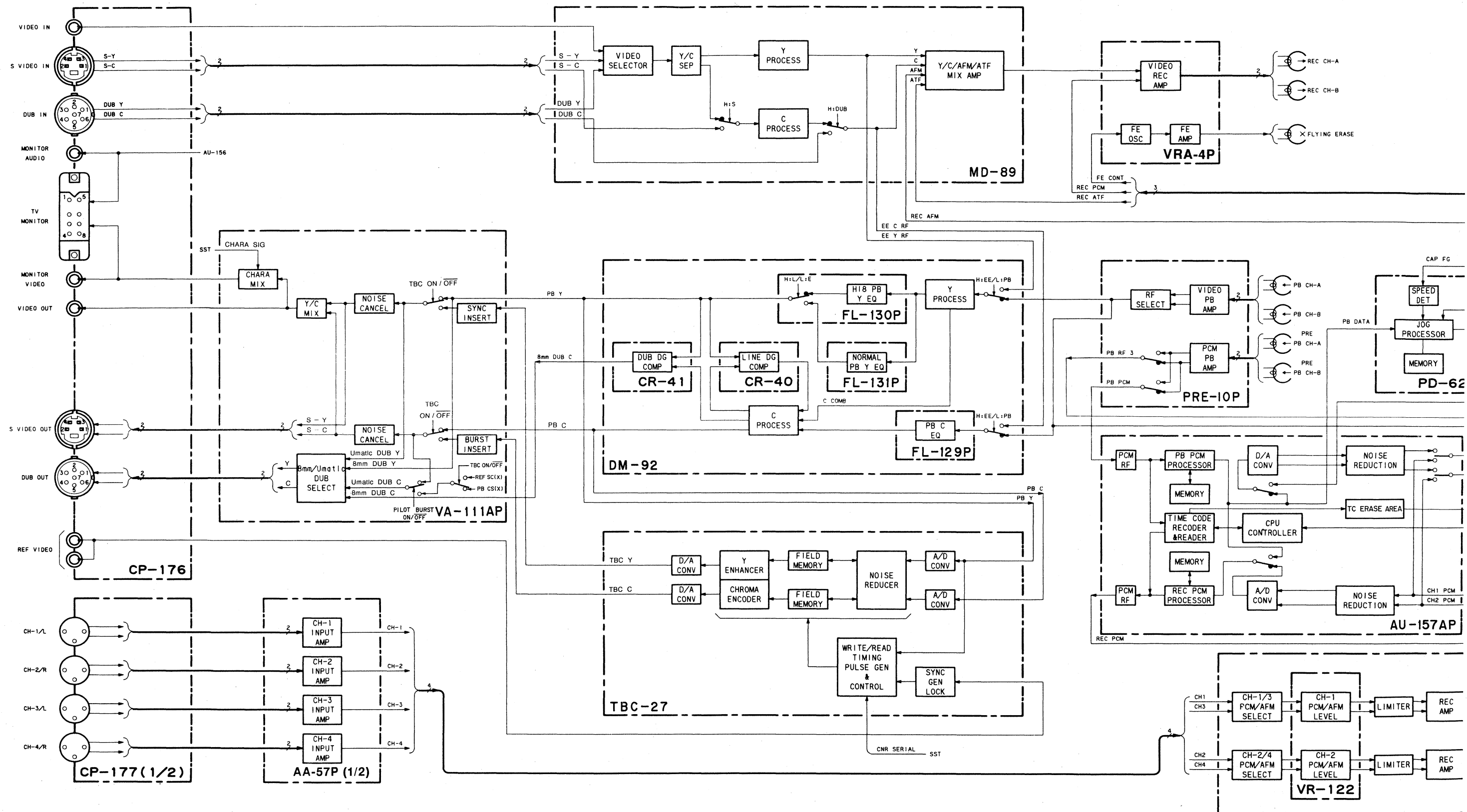
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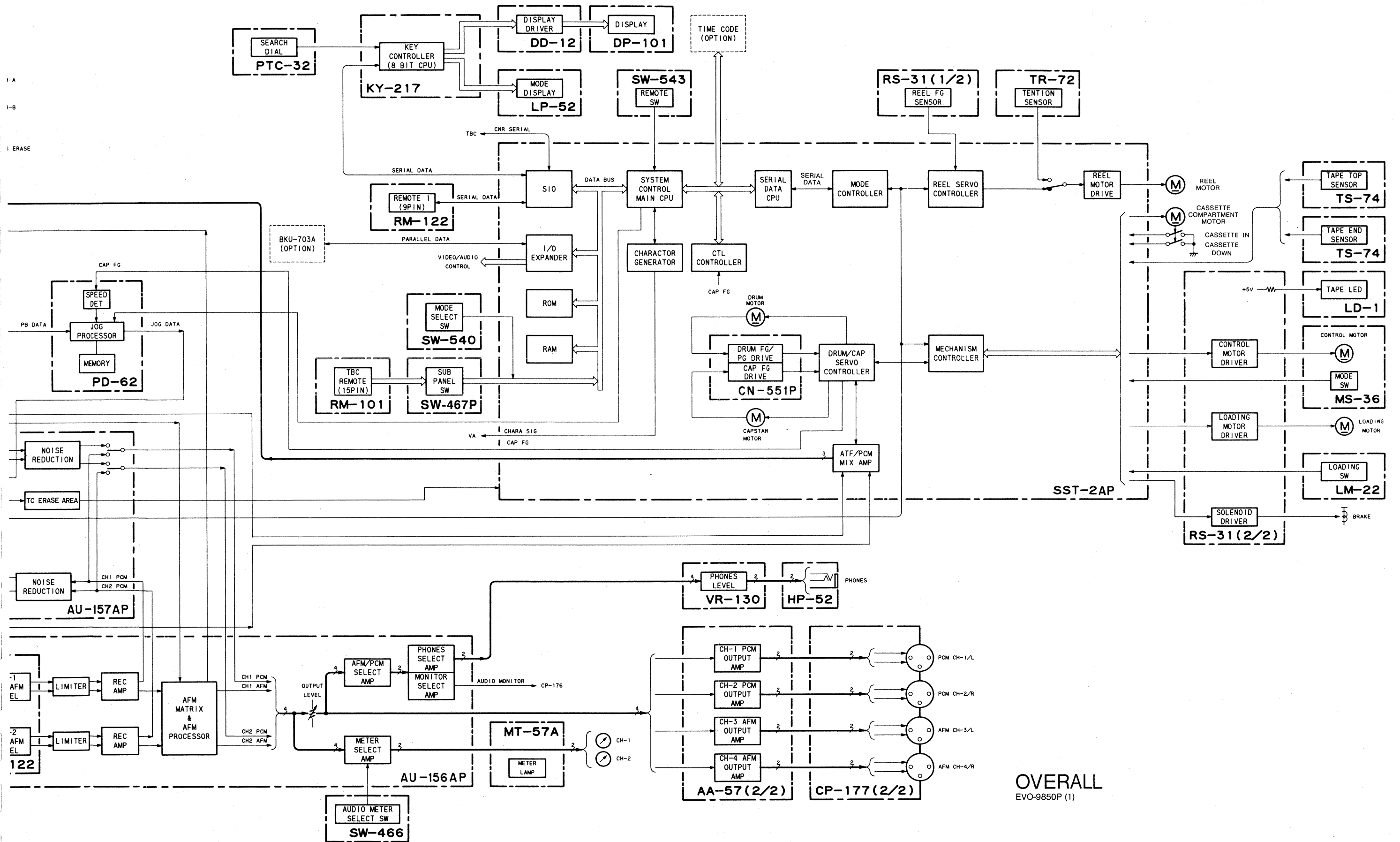
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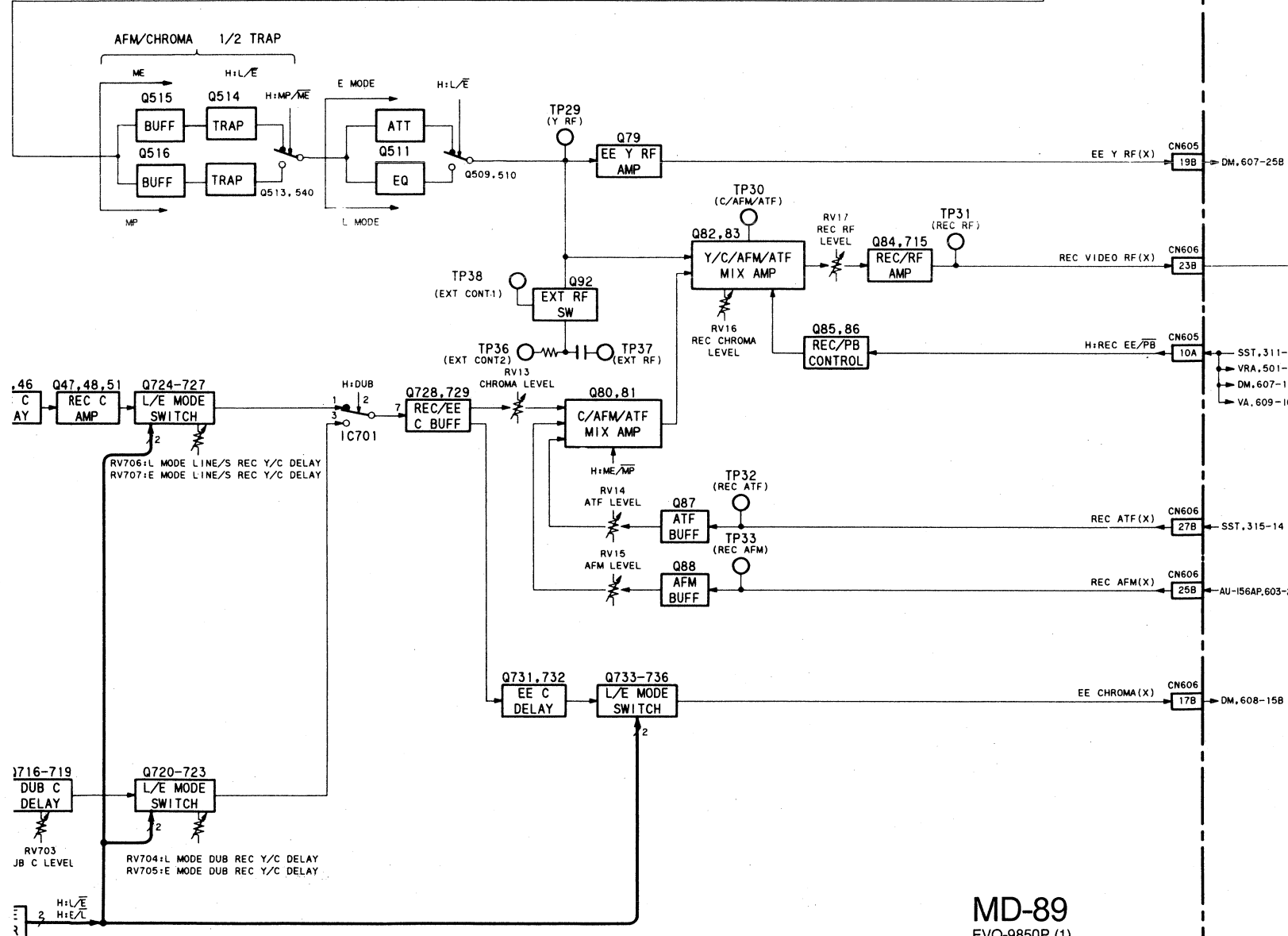
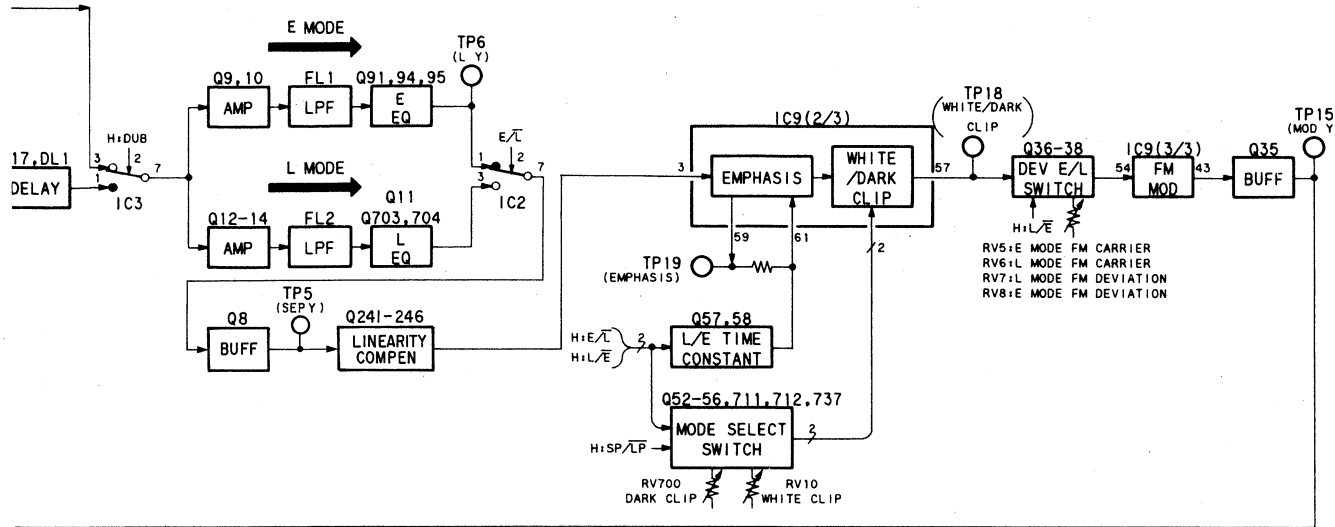
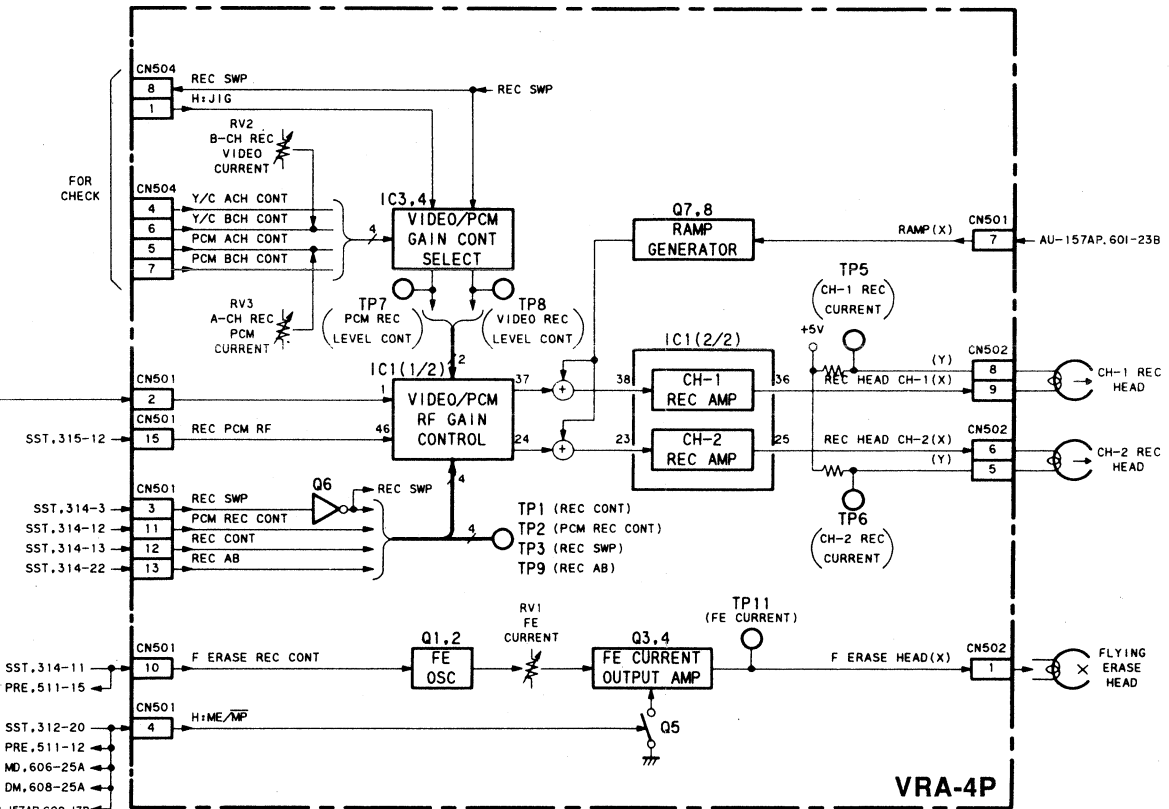




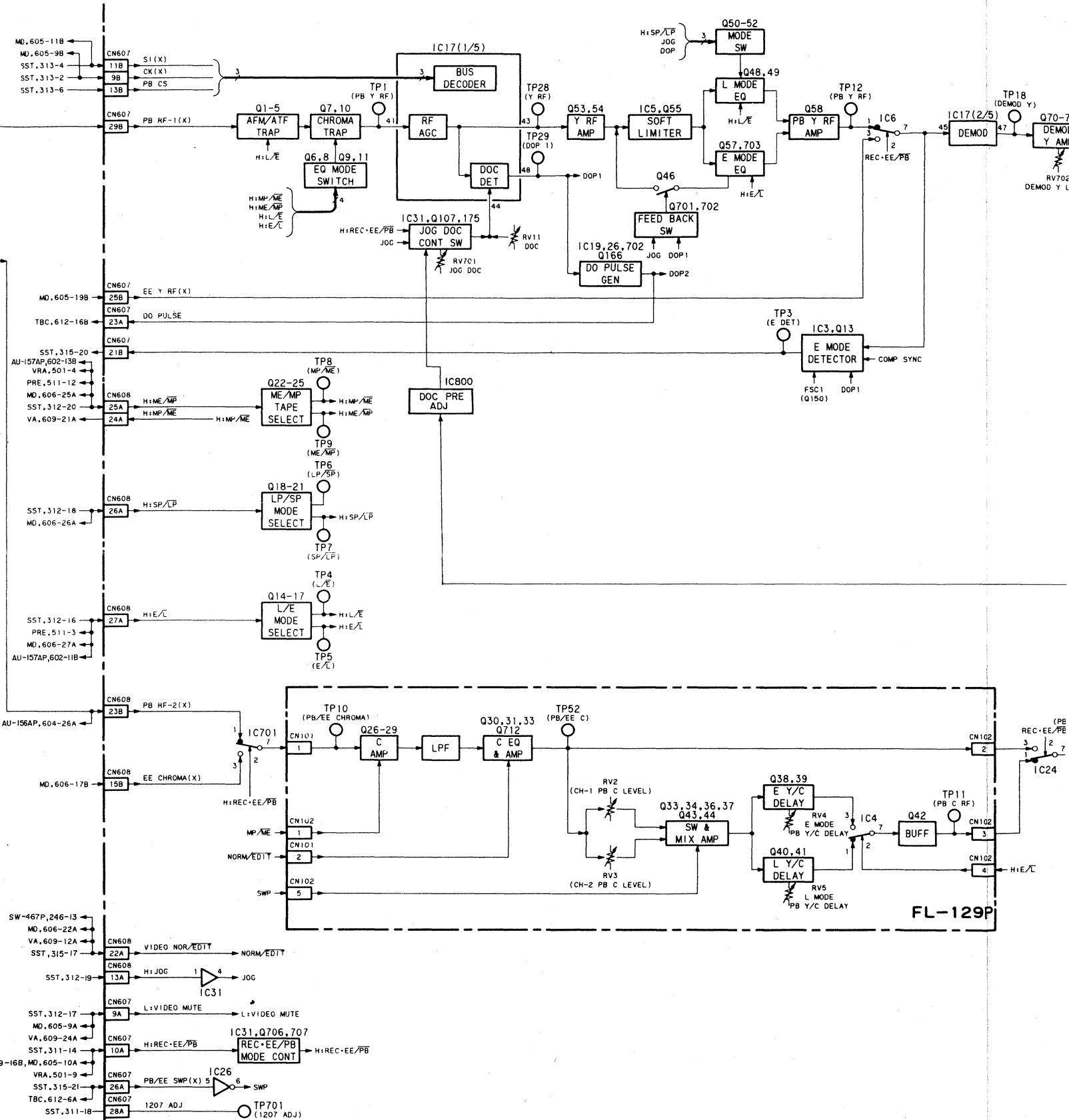
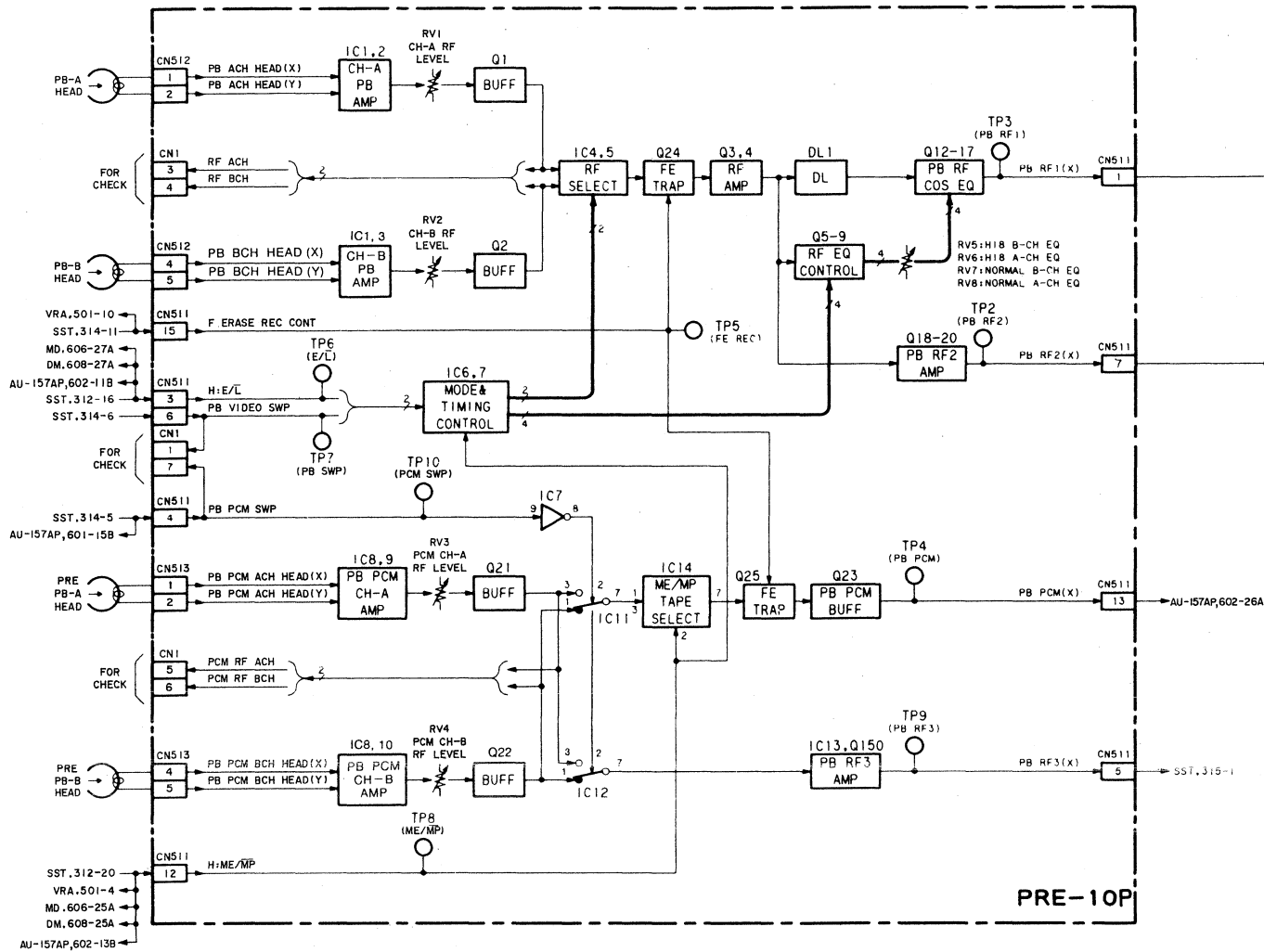
OVERALL  
EVO-9850P (1)

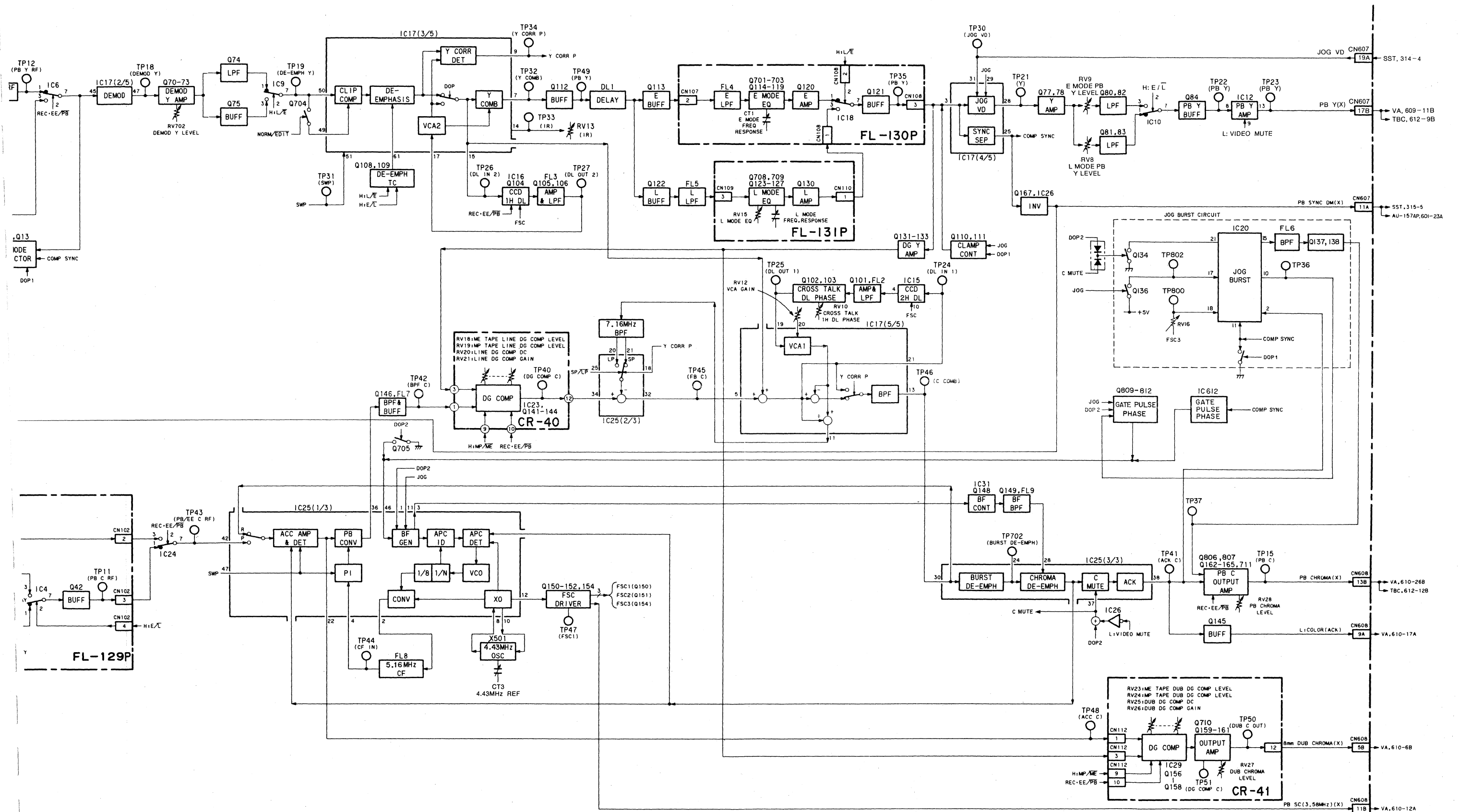
**VIDEO VIDEO**



MD-89  
EVO-9850P (1)

# PB Video Processor

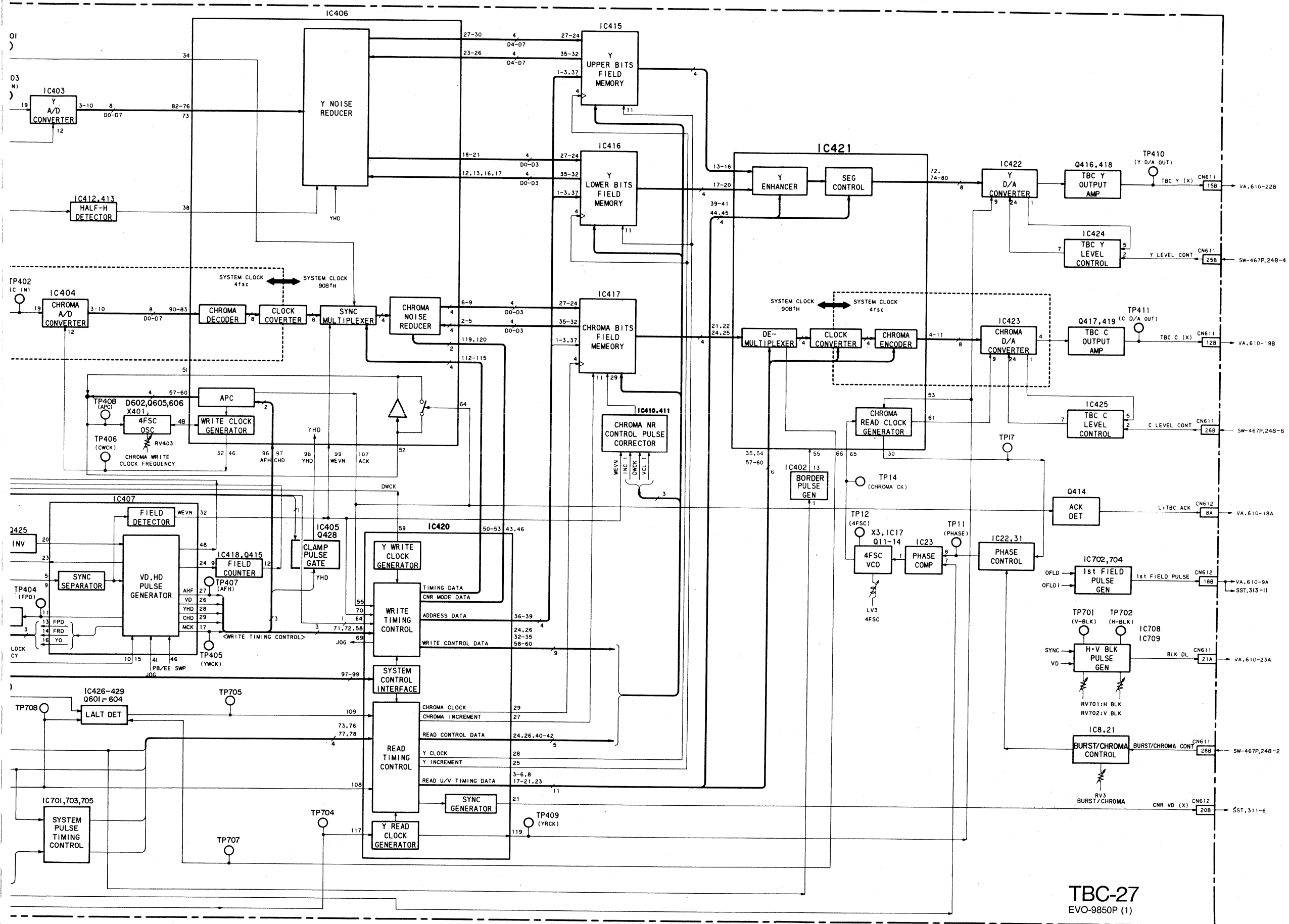




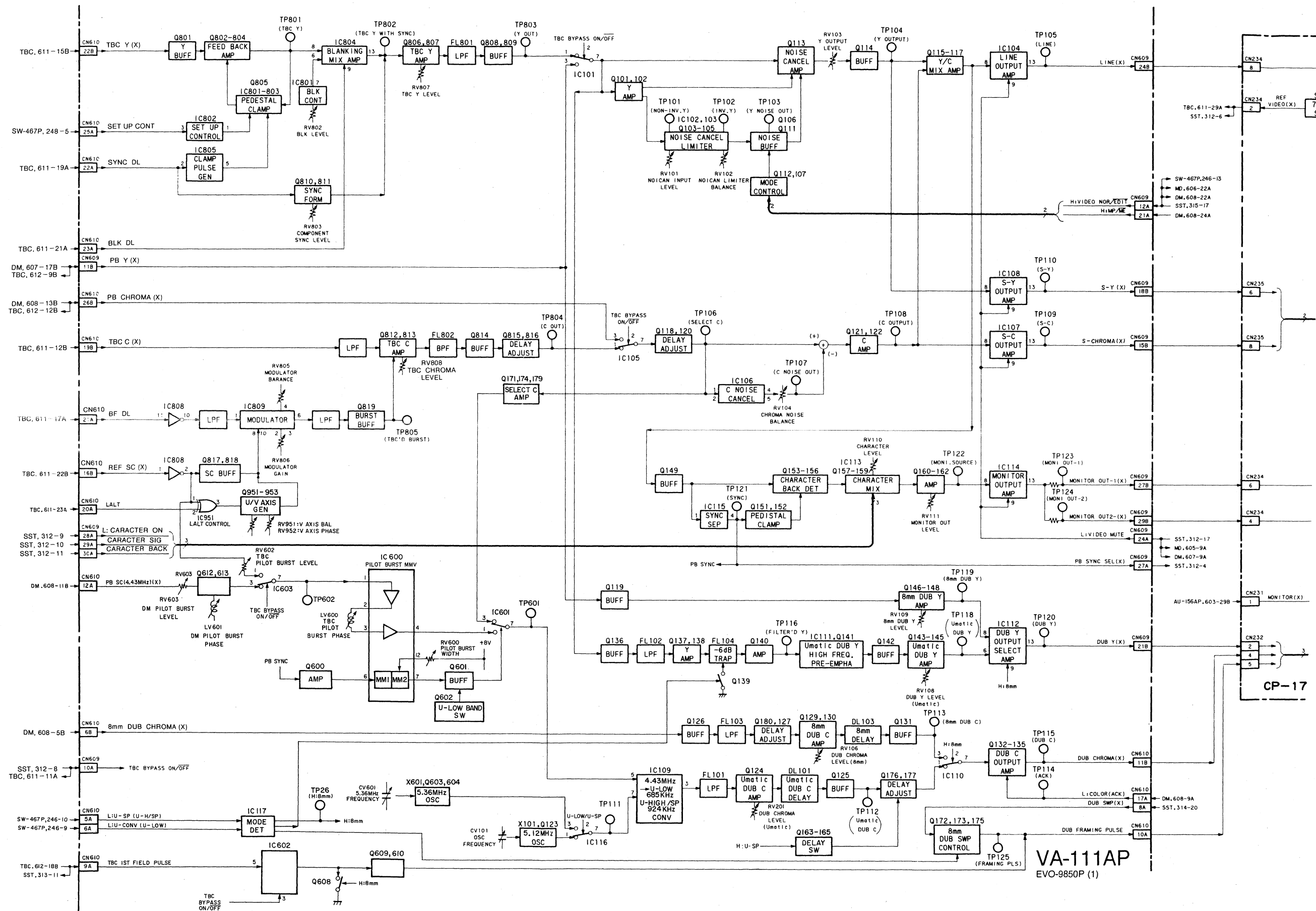
DM-92  
EVO-9850P (1)

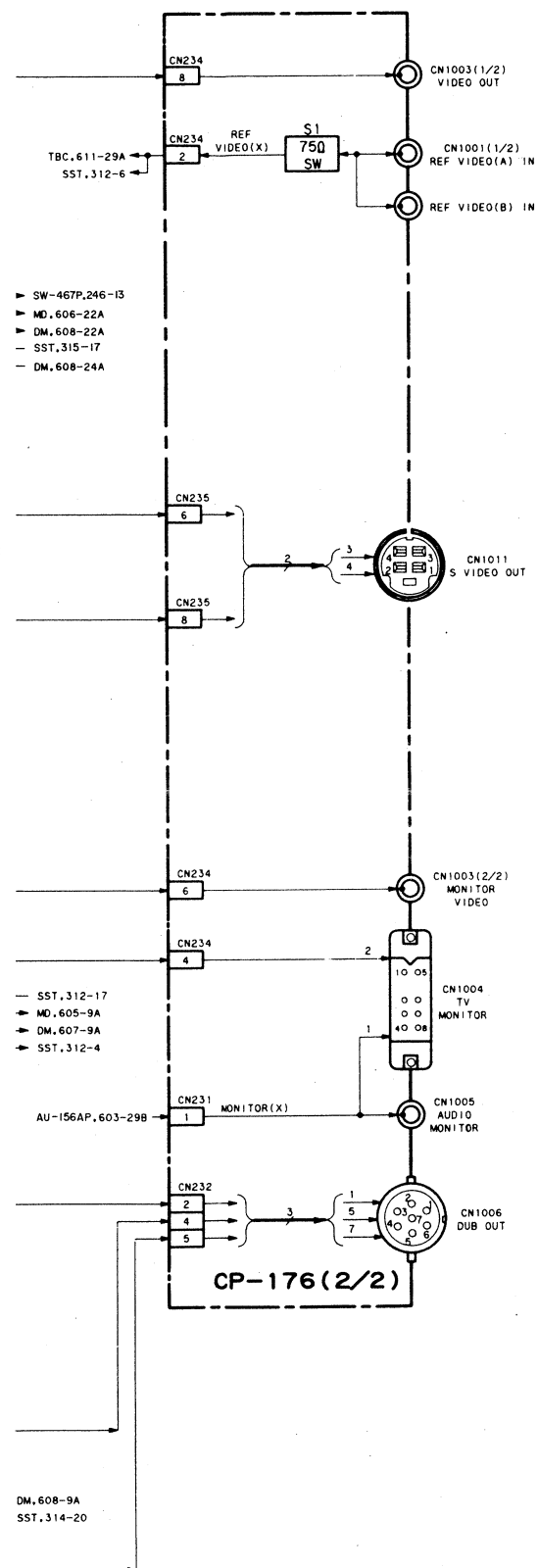




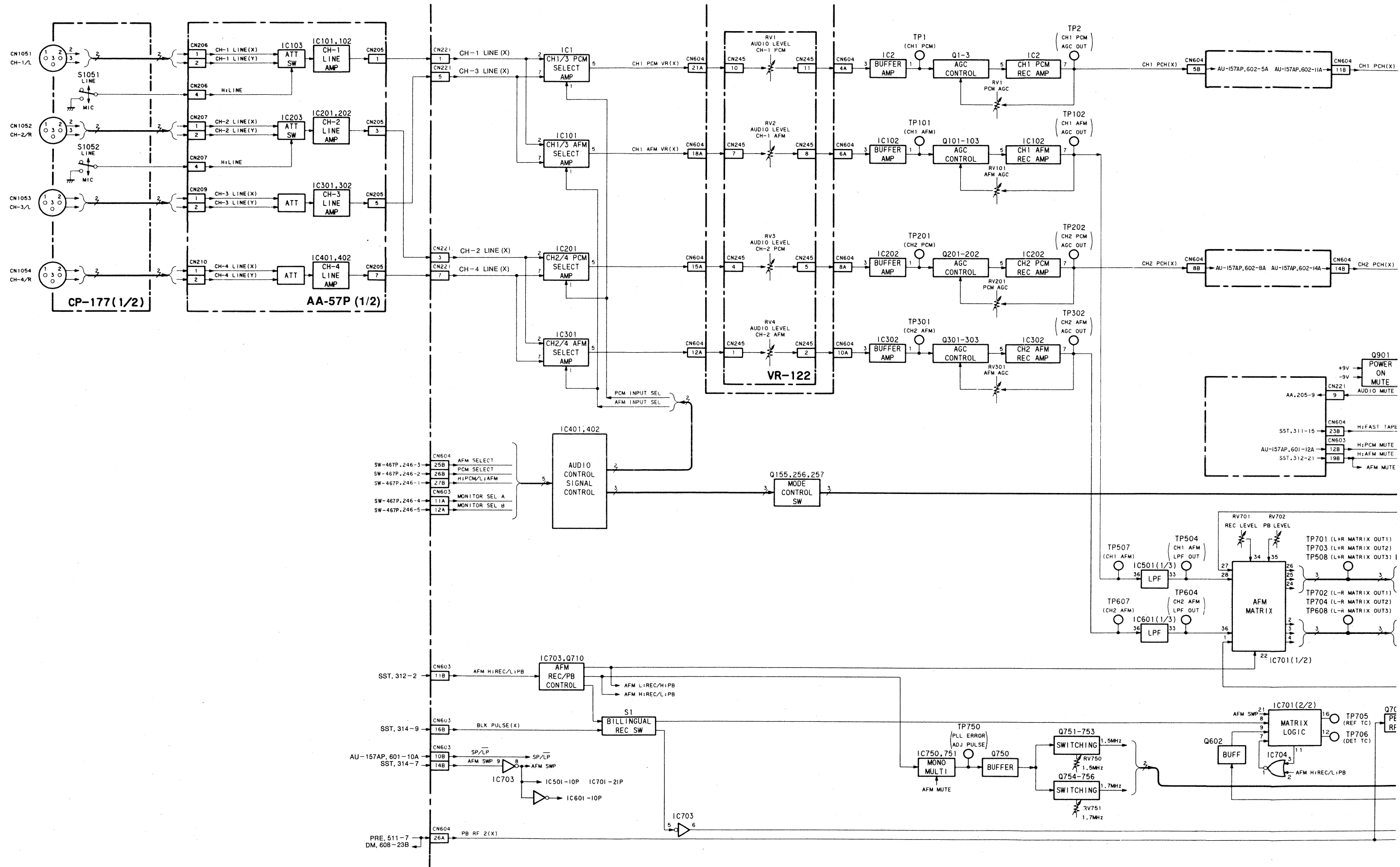


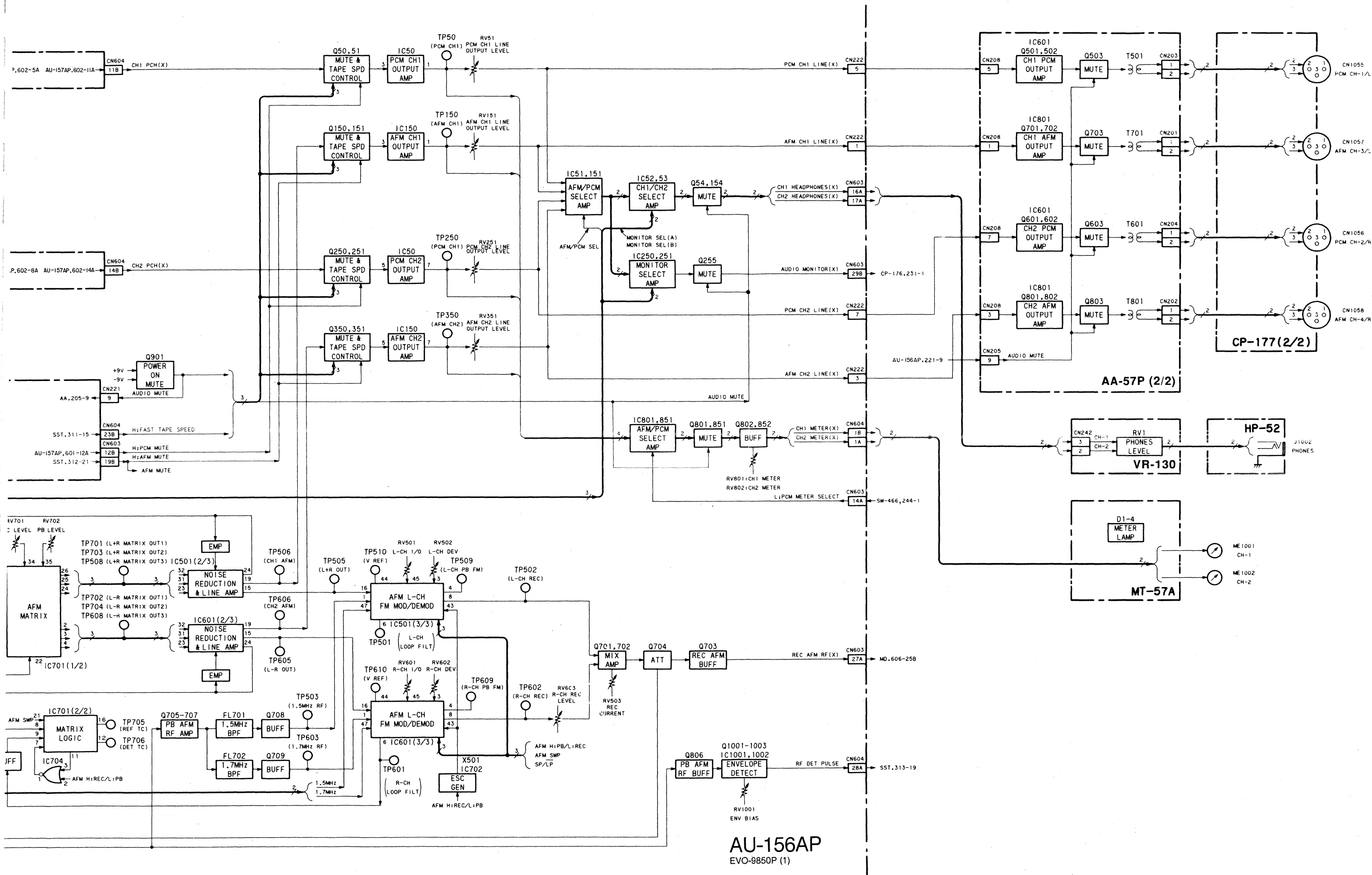
Video Interface/Sync, Burst Insert



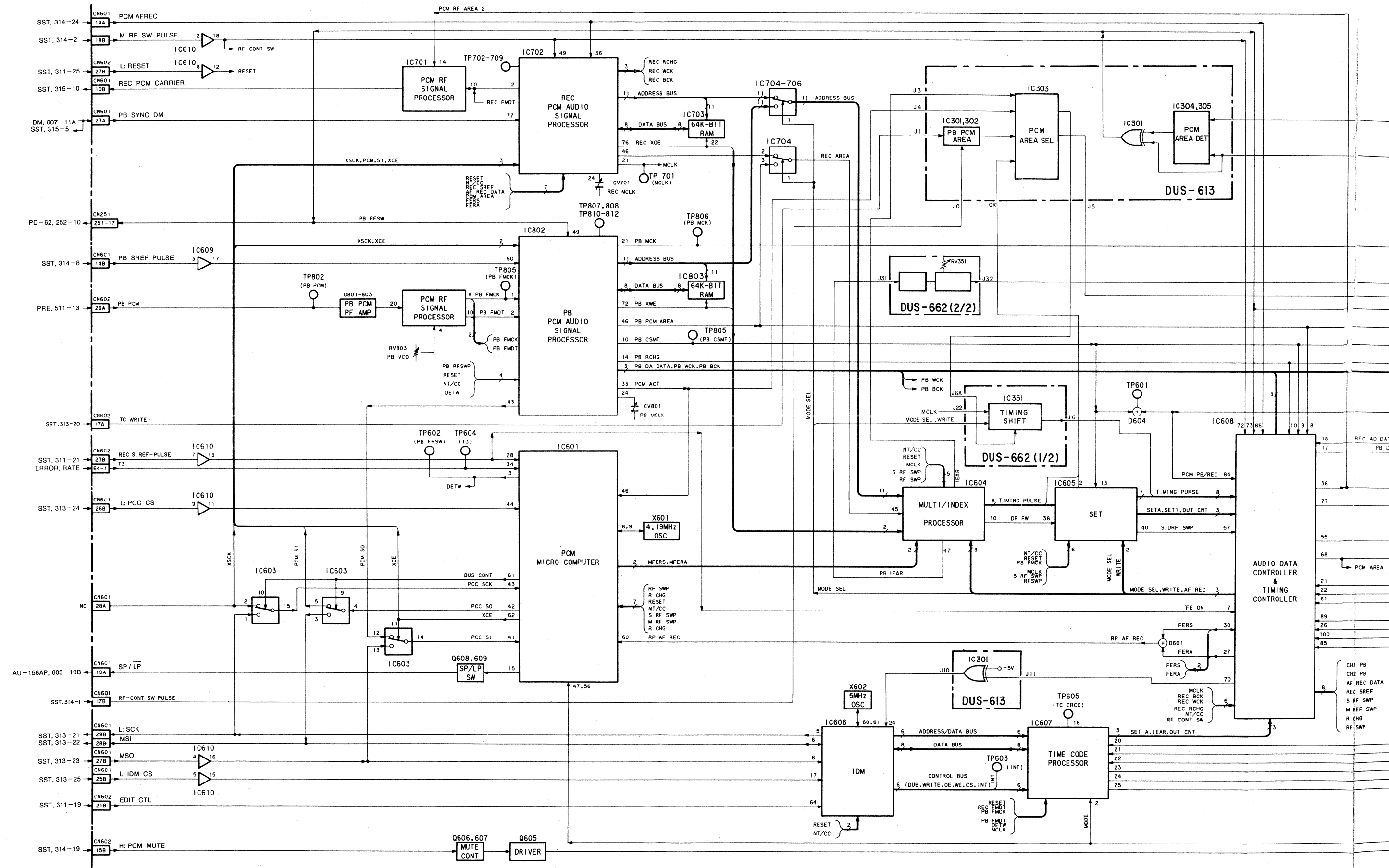


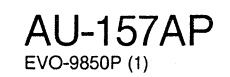
# AFM Audio Processor



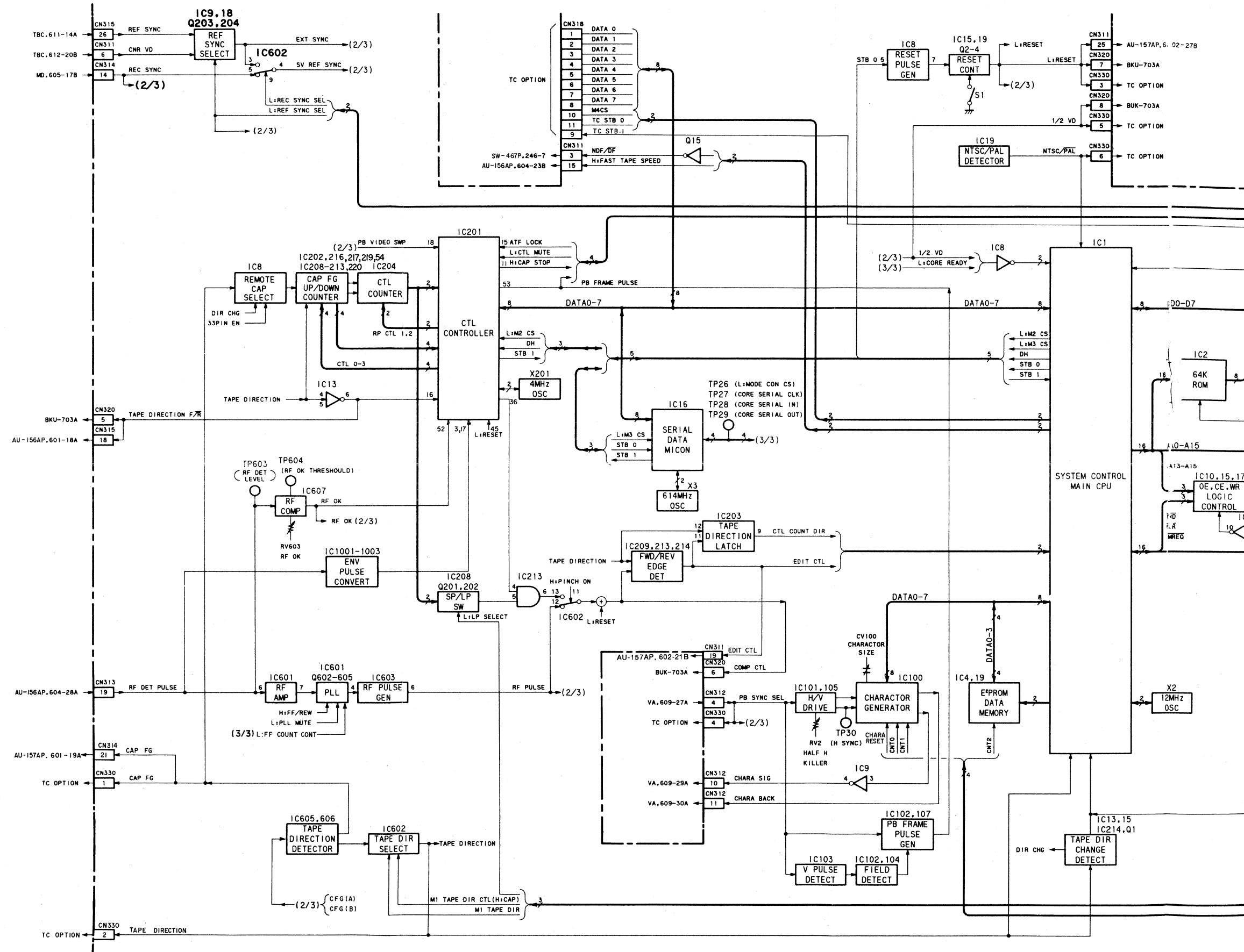


# PCM Audio Processor

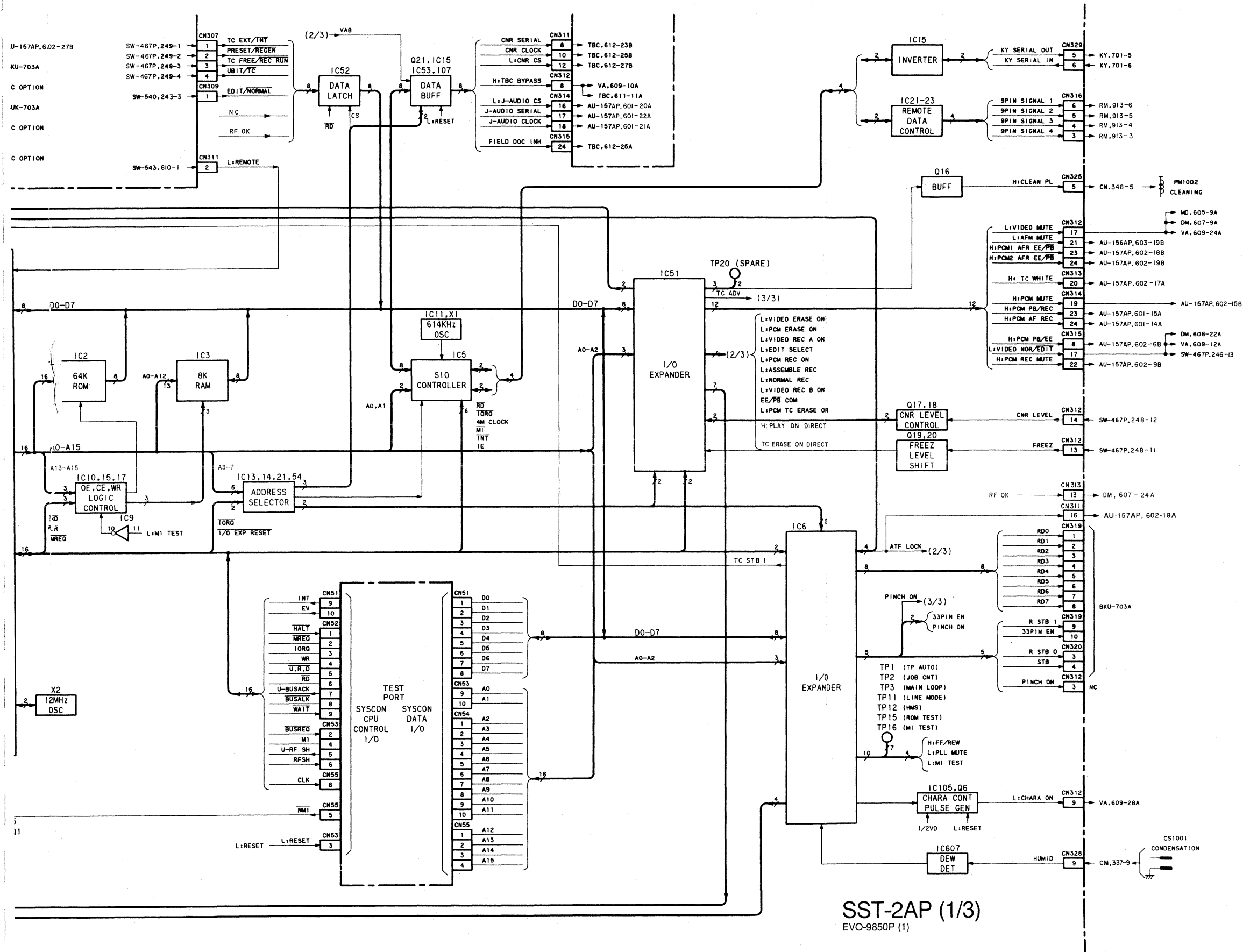




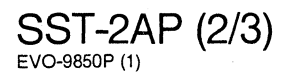
SYSTEM CONTROL      SYSTEM CONTROL







### Drum/Capstan/ATF Servo Control





## SECTION 12

### SEMICONDUCTOR PIN ASSIGNMENTS

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

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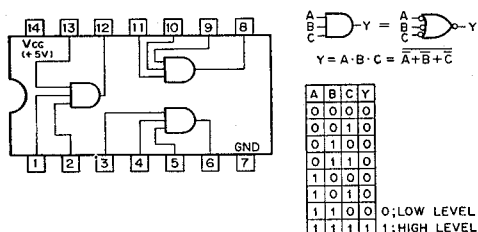
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## DIODE PAGE

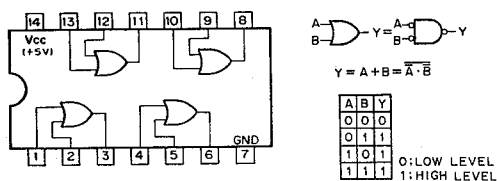
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The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

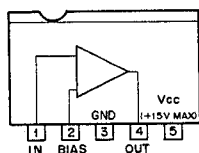
74F11SJ (NS) FLAT PACKAGE  
TTL 3-INPUT POSITIVE-AND GATE  
- TOP VIEW -



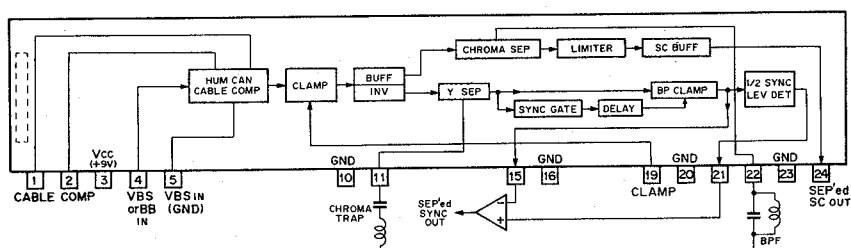
74F32SJ (NS) FLAT PACKAGE  
TTL 2-INPUT POSITIVE-OR GATE  
- TOP VIEW -



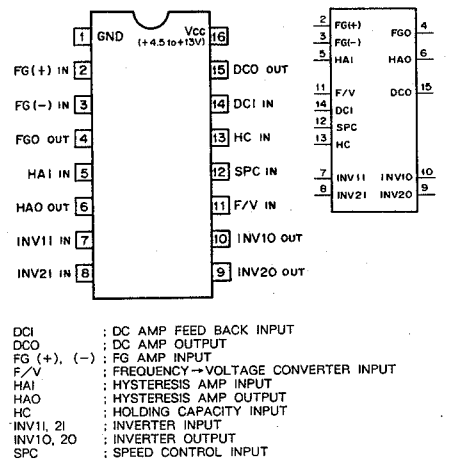
BA401 (ROHM)  
RF AMPLIFIER  
- SIDE VIEW -



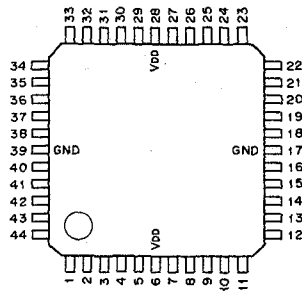
BX1040 (SONY)  
SYNC SEPARATOR  
- REAR VIEW -



BA6303F (ROHM) FLAT PACKAGE  
FG SYSTEM SPEED SERVO CONTROLLER  
- TOP VIEW -



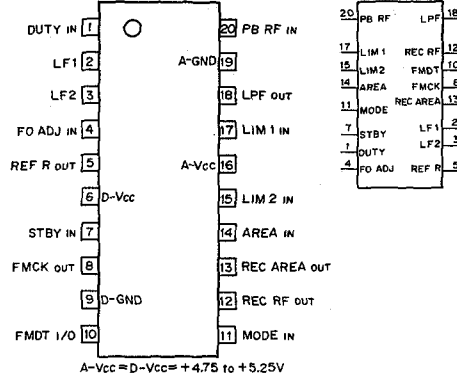
CF77309FR (TI)  
CMOS TIMING GENERATOR FOR 8mm VTR ADDRESS SYSTEM  
- TOP VIEW -



(V<sub>DD</sub> = +5V)

| PIN NO. | I/O | SIGNAL          | PIN NO. | I/O | SIGNAL   | PIN NO. | I/O | SIGNAL          | PIN NO. | I/O | SIGNAL  |
|---------|-----|-----------------|---------|-----|----------|---------|-----|-----------------|---------|-----|---------|
| 1       | I   | IEAR            | 12      | I   | CSMT     | 23      | O   | LCLK            | 34      | I   | RAMP    |
| 2       | O   | SIEAR           | 13      | I   | CRCHMON1 | 24      | O   | SW POS          | 35      | O   | S RAMP  |
| 3       | I   | RFMDZ           | 14      | I   | FMCK     | 25      | I   | CAM/DECK        | 36      | I   | RAREA   |
| 4       | O   | S RFMD          | 15      | I   | P1/P2    | 26      | I   | MODE            | 37      | O   | S RARE  |
| 5       | I   | RFAR            | 16      | I   | AUTO     | 27      | I   | WRITE           | 38      | I   | DRSWP   |
| 6       | -   | V <sub>DD</sub> | 17      | -   | GND      | 28      | -   | V <sub>DD</sub> | 39      | -   | GND     |
| 7       | O   | S RFAR          | 18      | I   | MCLK1    | 29      | I   | RESET           | 40      | O   | S DRSWP |
| 8       | I   | FERA            | 19      | O   | MCLK2    | 30      | I   | RFSWP           | 41      | I   | MDAR    |
| 9       | O   | S FERA          | 20      | I   | SREF     | 31      | O   | OUT CNT         | 42      | O   | S MDAR  |
| 10      | I   | FERS            | 21      | O   | PCO      | 32      | O   | SET1            | 43      | I   | TEST1   |
| 11      | O   | S FERS          | 22      | I   | NTSC/PAL | 33      | O   | SET1010         | 44      | I   | TEST2   |

CX20102 (SONY) FLAT PACKAGE  
PCM-RF SIGNAL PROCESSOR  
- TOP VIEW -



A - V<sub>CC</sub> = D - V<sub>CC</sub> = +4.75 to +5.25V

| STBY | MODE | AREA | OPERATION  |
|------|------|------|------------|
| 0    | X    | X    | POWER SAVE |
| 1    | 1    | X    | PB         |
| 1    | 0    | 1    | REC        |
| 1    | 0    | 0    | RECSTANDBY |

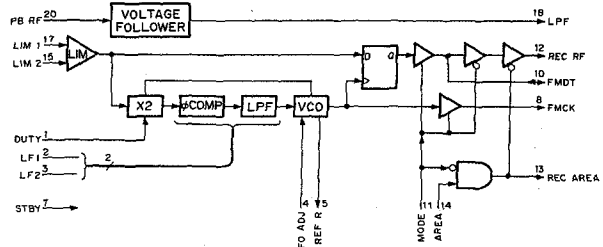
0 : LOW LEVEL  
1 : HIGH LEVEL  
X : DON'T CARE

**INPUT**  
AREA : AREA INPUT (C MOS LEVEL)  
DUTY : SAMPLING PHASE FINE ADJUSTMENT  
FO ADJ : VCO FREE RUN FREQUENCY ADJUSTMENT  
LIM 1, 2 : LIMITER INPUT  
MODE : REC/PB SELECTOR (C MOS LEVEL)  
PB RF : VOLTAGE FOLLOWER INPUT  
STBY : POWER SAVE CONTROL INPUT  
L : STAND BY (C MOS LEVEL)

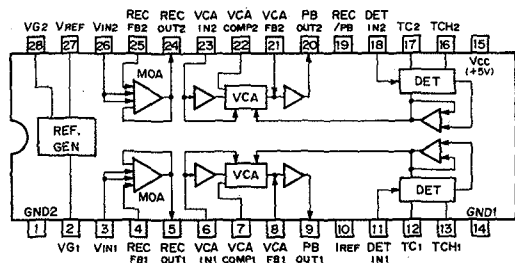
**OUTPUT**  
FMCK : CLOCK OUTPUT  
LFF : VOLTAGE FOLLOWER OUTPUT  
REC AREA : REC AREA OUTPUT (C MOS LEVEL)  
REC RF : REC MODE RF OUTPUT (C MOS LEVEL)  
REF R : RESISTOR EXTERNAL ATTACHED VCO

**INPUT/OUTPUT**  
FMDT : DATA INPUT/OUTPUT

**OTHER**  
LFI, 2 : EXTERNAL LOOP FILTER TIME CONSTANT

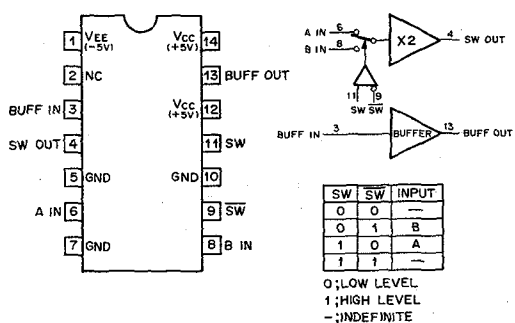


CX20099 (SONY) FLAT PACKAGE  
VOLTAGE CONTROLLED AMP/DETECTOR/MAIN OPERATIONAL AMP  
- TOP VIEW -

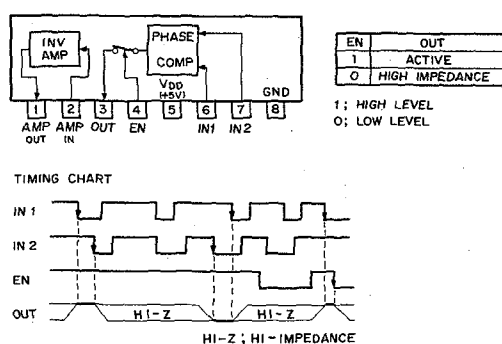


DET : DETECTOR  
TC : TIME CONSTANT  
TCH : TIME CONSTANT HOLD  
VCA : VOLTAGE CONTROLLED AMP

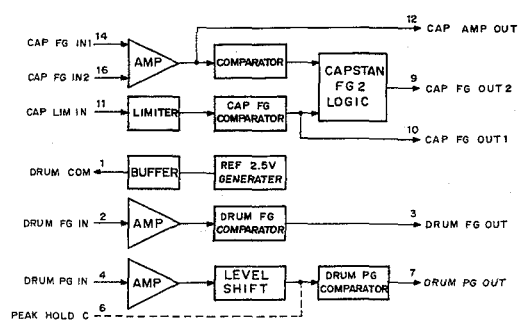
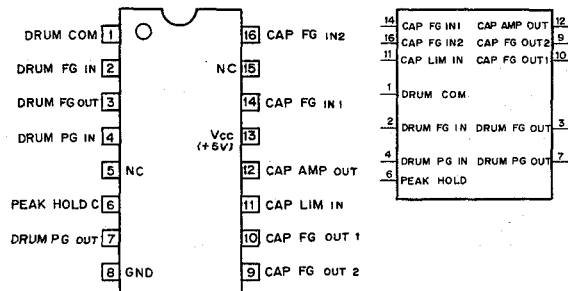
CX20158 (SONY) FLAT PACKAGE  
VIDEO SWITCHER AND BUFFER  
- TOP VIEW -



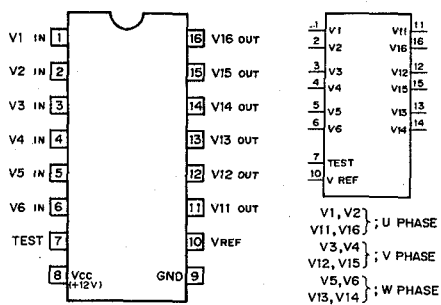
CX23065A (SONY)  
N-MOS PHASE COMPARATOR WITH INVERSION AMPLIFIER  
- PRINTED SIDE VIEW -



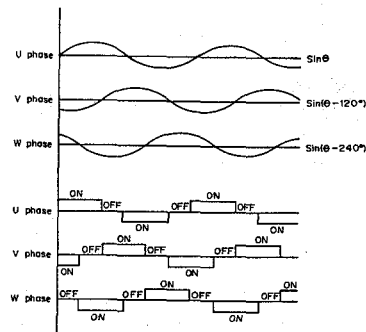
CX20115A (SONY) FLAT PACKAGE  
MOTOR SENSE AMP  
- TOP VIEW -



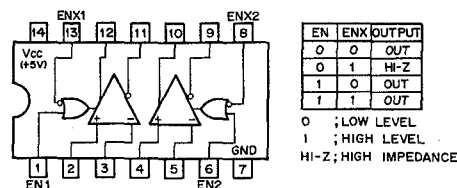
CX877 (SONY)  
MOTOR DRIVER  
- TOP VIEW -



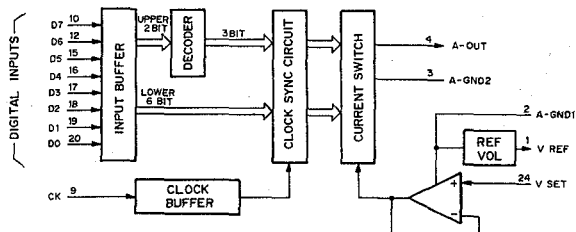
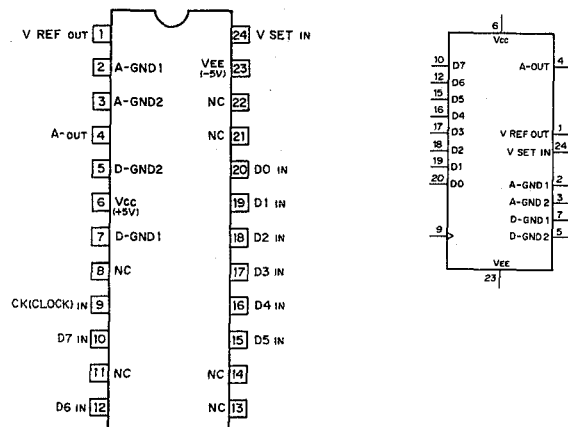
TIMING CHART



CXA1077M (SONY)  
DUAL DIFFERENTIAL PRE-AMPLIFIER  
- TOP VIEW -

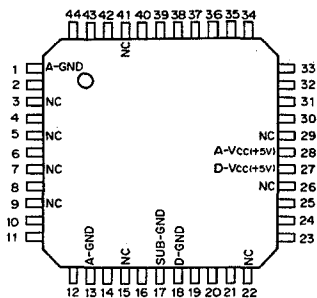


CXA1106M (SONY) FLAT PACKAGE  
8-BIT D/A CONVERTER (TTL INPUT)  
- TOP VIEW -





## CXA1204Q (SONY) FLAT PACKAGE

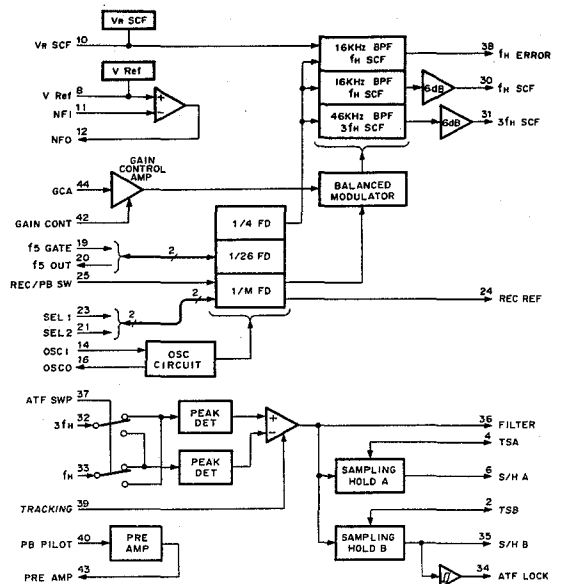
CMOS ATF (Automatic Track Finding) FOR 8mm VTR  
- TOP VIEW -

(A - Vcc = D - Vcc = + 5V)

| PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL    | PIN NO. | I/O | SYMBOL    |
|---------|-----|--------|---------|-----|-----------|---------|-----|-----------|
| 1       | -   | A-GND  | 16      | O   | OSCO      | 31      | O   | 3fh SCF   |
| 2       | I   | TSB    | 17      | -   | SUB-GND   | 32      | I   | 3fh       |
| 3       | -   | NC     | 18      | -   | D-GND     | 33      | I   | fh        |
| 4       | I   | TSA    | 19      | I   | fs GATE   | 34      | O   | ATF LOCK  |
| 5       | -   | NC     | 20      | O   | fs OUT    | 35      | O   | S/H B     |
| 6       | O   | S/H A  | 21      | I   | SEL2      | 36      | O   | FILTER    |
| 7       | -   | NC     | 22      | -   | NC        | 37      | I   | ATF SWP   |
| 8       | I   | Vref   | 23      | I   | SEL1      | 38      | O   | fh ERROR  |
| 9       | -   | NC     | 24      | O   | REC REF   | 39      | I   | TRACKING  |
| 10      | I   | Vr SCF | 25      | I   | REC/PB SW | 40      | I   | PB PILOT  |
| 11      | I   | NFI    | 26      | -   | NC        | 41      | -   | NC        |
| 12      | O   | NFO    | 27      | -   | D-Vcc     | 42      | I   | GAIN CONT |
| 13      | -   | A-GND  | 28      | -   | A-Vcc     | 43      | O   | PRE AMP   |
| 14      | I   | OSCI   | 29      | -   | NC        | 44      | I   | GCA       |
| 15      | -   | NC     | 30      | O   | fh SCF    |         |     |           |

| PIN NO. | I/O | SYMBOL    | INPUT    | SYMBOL | OUTPUT       |
|---------|-----|-----------|----------|--------|--------------|
| 44      | I   | GCA       | fh SCF   | 31     | 3fh          |
| 42      | I   | GAIN CONT | 3fh SCF  | 31     | ATF SWP      |
| 10      | I   | Vr SCF    | fh ERROR | 38     | fh           |
| 18      | I   | fs GATE   | fs OUT   | 20     | GAIN CONT    |
| 23      | I   | SEL1      | REC REF  | 24     | GCA          |
| 21      | I   | SEL2      | REC REF  | 24     | NFI          |
| 25      | I   | REC/PB SW | OSCI     | 14     | OSC I        |
| 33      | I   | fh        | OSC O    | 16     | PB PILOT     |
| 32      | I   | 3fh       | OSC O    | 16     | REC/PB SW    |
| 37      | I   | ATF SWP   | OSC O    | 16     | SEL1, SEL2   |
| 38      | I   | fh ERROR  | OSC O    | 16     | TRACKING     |
| 4       | I   | TSA       | OSC O    | 16     | TS A, TS B   |
| 36      | I   | FILTER    | OSC O    | 16     | S/H A, S/H B |
| 34      | I   | ATF LOCK  | OSC O    | 16     | V Ref        |
| 35      | I   | S/H B     | OSC O    | 16     | Vr SCF       |
| 3       | I   | TSB       | OSC O    | 16     |              |
| 6       | I   | S/H A     | OSC O    | 16     |              |
| 12      | I   | NFI       | OSC O    | 16     |              |
| 43      | I   | PRE AMP   | OSC O    | 16     |              |
| 40      | I   | PB PILOT  | OSC O    | 16     |              |

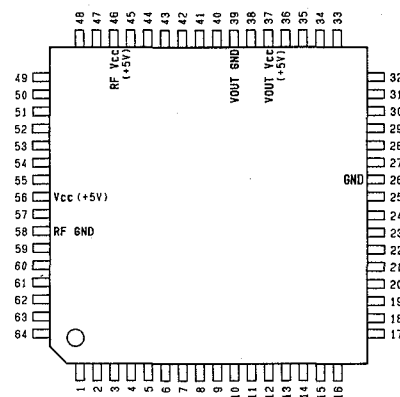
| INPUT | SEL1 | SEL2 | DIVIDING RATIO |
|-------|------|------|----------------|
| 0     | 0    | 0    | 1/40           |
| 0     | 1    | 1    | 1/50           |
| 1     | 0    | 0    | 1/36           |
| 1     | 1    | 1    | 1/58           |

0 : LOW LEVEL (up to 0.5V)  
1 : HIGH LEVEL (at least 3.5V)NOTE: FD; FREQUENCY DEMULTIPLIER  
SCF; SWITCHED CAPACITOR FILTER

## CXA1207AR (SONY)

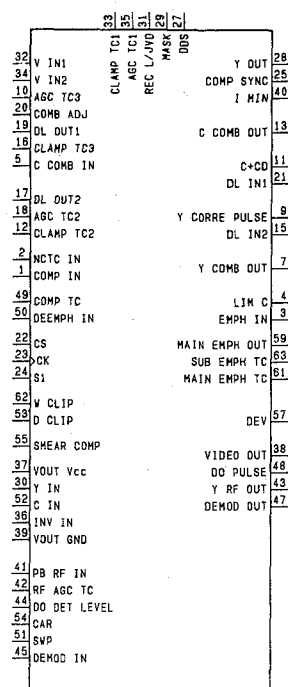
8mm VTR LUMINANCE SIGNAL PROCESSING

- TOP VIEW -



(Vcc = +5V)

| PIN NO. | I/O | SIGNAL        | PIN NO. | I/O | SIGNAL    | PIN NO. | I/O | SIGNAL       | PIN NO. | I/O | SIGNAL        |
|---------|-----|---------------|---------|-----|-----------|---------|-----|--------------|---------|-----|---------------|
| 1       | I   | COMP IN       | 17      | I   | DL OUT2   | 33      | I   | CLAMP TC1    | 49      | I   | COMP TC       |
| 2       | I   | NCTC IN       | 18      | I   | AGC TC2   | 34      | I   | V IN2        | 50      | I   | DEEMPH IN     |
| 3       | I   | EMPH IN       | 19      | I   | DL OUT1   | 35      | I   | AGC TC1      | 51      | I   | SWP           |
| 4       | I   | LIM C         | 20      | I   | COMB ADJ  | 36      | I   | JNV IN       | 52      | I   | C IN          |
| 5       | I   | C COMB IN     | 21      | O   | DL IN1    | 37      | -   | VOUT Vcc     | 53      | I   | D CLIP        |
| 6       | -   | VREG          | 22      | I   | CS        | 38      | O   | VIDEO OUT    | 54      | I   | CAR           |
| 7       | O   | Y COMB OUT    | 23      | I   | CK        | 39      | -   | VOUT GND     | 55      | I   | SHEAR COMP    |
| 8       | -   | IR            | 24      | I   | S1        | 40      | I   | I MIN        | 56      | -   | Vcc           |
| 9       | O   | Y CORRE PULSE | 25      | I   | COMP SYNC | 41      | I   | PB RF IN     | 57      | I   | DEV           |
| 10      | I   | AGC TC3       | 26      | -   | GND       | 42      | I   | RF AGC TC    | 58      | -   | RF GND        |
| 11      | O   | C*CD          | 27      | I   | DDS       | 43      | O   | Y RF OUT     | 59      | O   | MAIN ENPH OUT |
| 12      | I   | CLAMP TC2     | 28      | O   | Y OUT     | 44      | I   | DO DET LEVEL | 60      | -   | V61           |
| 13      | O   | C COMB OUT    | 29      | I   | MASK      | 45      | I   | DEMOM IN     | 61      | O   | MAIN ENPH TC  |
| 14      | -   | VREF          | 30      | I   | Y IN      | 46      | -   | RF Vcc       | 62      | I   | V CLIP        |
| 15      | O   | DL IN2        | 31      | I   | REC L/JVD | 47      | O   | DEMOM OUT    | 63      | O   | SUB ENPH TC   |
| 16      | I   | CLAMP TC3     | 32      | I   | V IN1     | 48      | O   | DO PULSE     | 64      | -   | V62           |



**INPUT**

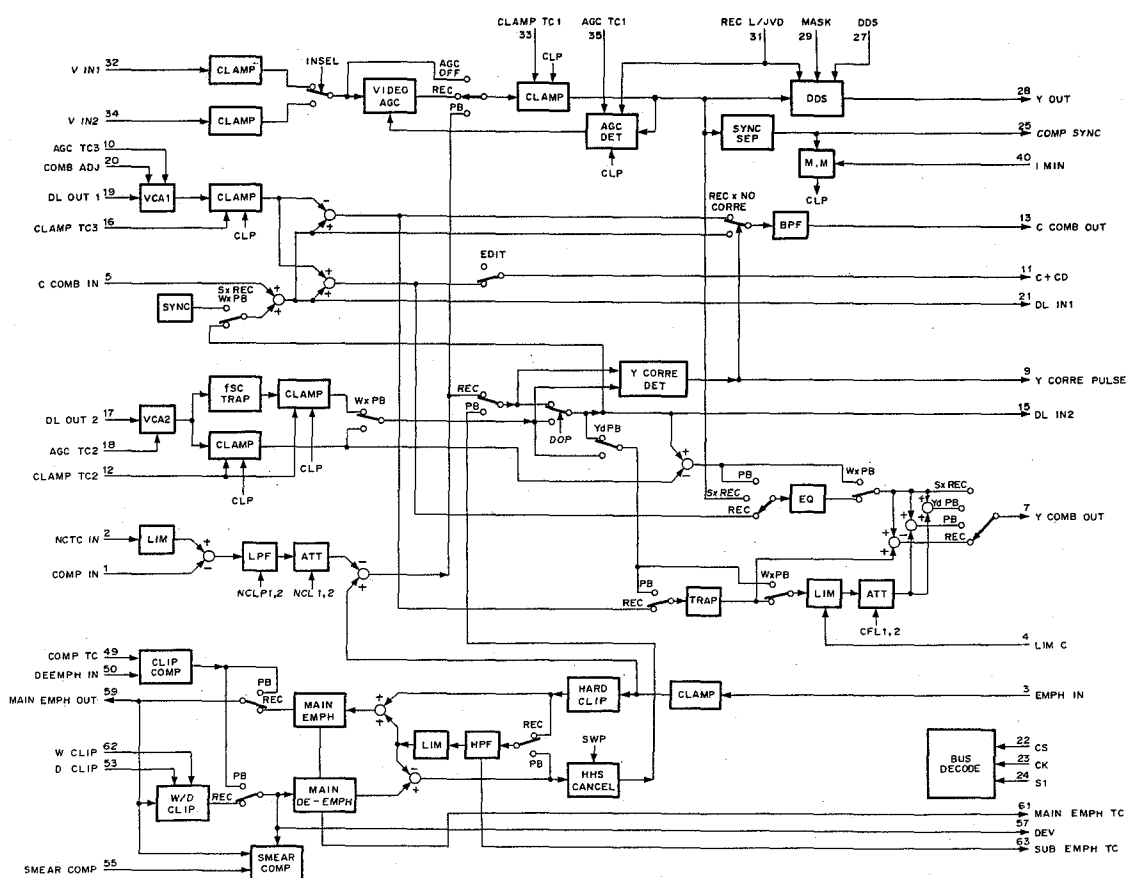
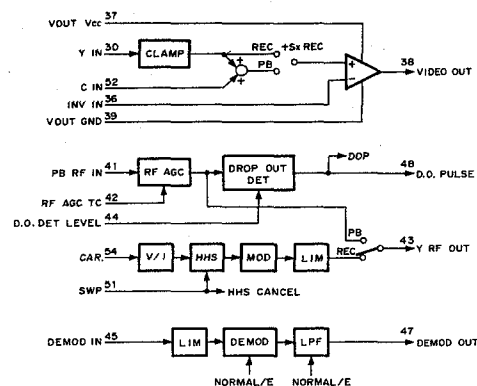
AGC TC1: TIME CONSTANT CONNECT FOR I/O BLOCK AGC CIRCUIT.  
 AGC TC2, TC3: TIME CONSTANT CONNECT FOR VCA CIRCUIT IN COMB FILTER BLOCK.  
 C COMB IN: CHROMA INPUT SIGNAL TO COMB FILTER.  
 C IN: CHROMA SIGNAL INPUT.  
 CAR: CARRIER FREQUENCY SET.  
 CK: CLOCK.  
 CLAMP TC1-TC3: TIME CONSTANT CONNECT FOR FEEDBACK CLAMP CIRCUIT.  
 COMB ADJ: VCA GAIN ADJUSTMENT PIN IN COMB FILTER BLOCK.  
 COMP IN: APPLIES EXTERNAL TIME CONSTANT CONNECT FOR NOISE CANCELER HPF.  
 COMP TC: APPLIES EXTERNAL TIME CONSTANT CONNECT FOR CLIP COMP CIRCUIT.  
 CS: CHIP SELECT.  
 D CLIP: DARK CLIP LEVEL DETERMINES.  
 DEEMPH IN: DEEMPHASIS CIRCUIT INPUT.  
 DEMOD IN: FM-DEMODULATION CIRCUIT INPUT.  
 DDS: DDS (DATE DISPLAY SYSTEM) VOW (CHARACTER LEVEL) SIGNAL INPUT.  
 DL OUT1: CCD DL (DELAY LINE) OUTPUT SIGNAL INPUT.  
 DL OUT2: CCD DL (DELAY LINE) OUTPUT SIGNAL INPUT.  
 DO DET LEVEL: DROPOUT DETECTION LEVEL DETERMINES.  
 EMPH IN: EMPHASIS INPUT WHEN REC NOISE CANCELER OUT WHEN PB.  
 INV IN: INVERTED INPUT FOR Y SAG CORRECTION.  
 LIM C: CAPACITOR CONNECT FOR LIMITER IN PLAYBACK Y COMB BLOCK.  
 MAIN EMPH TC: TIME CONSTANT CONNECT FOR MAIN EMPHASIS/DEEMPHASIS.  
 MAIN EMPH OUT: TIME CONSTANT CONNECT FOR MAIN EMPHASIS AND MAIN DEEMPHASIS OUTPUTS EMPHASIZED.  
 MASK: MASK TIMING PULSE INPUT FOR VOB (CHARACTER SUPERIMPOSE).  
 NCTC IN: TIME CONSTANT CONNECT FOR NOISE CANCELER HPF.  
 REC L/JVD: LEVEL ADJUSTMENT WHEN REC.  
 RF AGC TC: TIME CONSTANT CONNECT FOR RF AGC CIRCUIT.  
 RF RF IN: RF SIGNAL INPUT.  
 S1: USE FOR HIGH LUMINANCE SHEAR COMPENSATION.  
 SUB EMPH TC: SERIAL INPUT.  
 SWP: TIME CONSTANT CONNECT FOR SUB EMPHASIS/DEEMPHASIS.  
 V IN1, V IN2: RF SWITCHING PULSE AND HEAD CHANGE PULSE.  
 VREG: VIDEO SIGNAL INPUTS.  
 W CLIP: 4.2 V REGULATOR OUTPUT PIN.  
 Y IN: WHITE CLIP LEVEL DETERMINES.  
 Y IN: Y SIGNAL OR VIDEO SIGNAL INPUT.

**OUTPUT**

C+CD: Y AND C SIGNALS PROCESSED BY Y COMB FILTER.  
 C COMB OUT: C SIGNAL PROCESSED BY COMB FILTER.  
 COMP SYNC: COMPOSITE SYNC SIGNAL.  
 DEMOD OUT: FM-DEMODULATED Y SIGNAL OUTPUT.  
 DEV: DEVIATION FREQUENCY.  
 DL IN1: SIGNAL OUT TO CCD DL.  
 DL IN2: PLAYBACK Y SIGNAL OUTPUT TO CCD DL.  
 DO PULSE: IN THE SYSTEM THAT TWO CCD DL ARE USED.  
 I MIN: DROPOUT DETECTION PULSE.  
 VIDEO OUT: EXTERNAL REFERENCE CURRENT SOURCE.  
 VREG: VIDEO OUT.  
 Y COMB OUT: 4.2 V REGULATOR OUTPUT.  
 Y CORRE PULSE: Y SIGNAL PROCESSED BY COMB FILTER.  
 Y OUT: ERROR PULSE FOR Y SIGNAL CORRELATION DETECTION.  
 Y RF OUT: I/O BLOCK SIGNAL.  
 Y RF OUT: FM-MODULATED Y SIGNAL OUT.

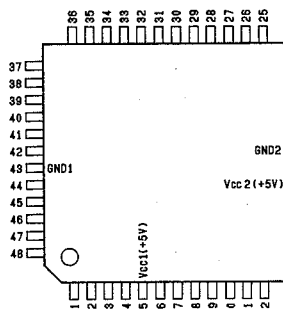
**OTHER**

IF: REFERENCE CURRENT SOURCE.  
 RF GND: RF BLOCK GND PIN.  
 RF VCC: RF BLOCK POWER SUPPLY FOR RF BLOCK.  
 V01, V02: INTERNAL REFERENCE VOLTAGE SOURCE.  
 VOUT VCC: POWER SUPPLY FOR VIDEO OUT CIRCUIT.  
 VOUT GND: GND FOR VIDEO OUT CIRCUIT.  
 VREF: INTERNAL REFERENCE VOLTAGE SOURCE.



## CX1A208R (SONY)

8mm VTR COLOR SIGNAL PROCESSING  
- TOP VIEW -

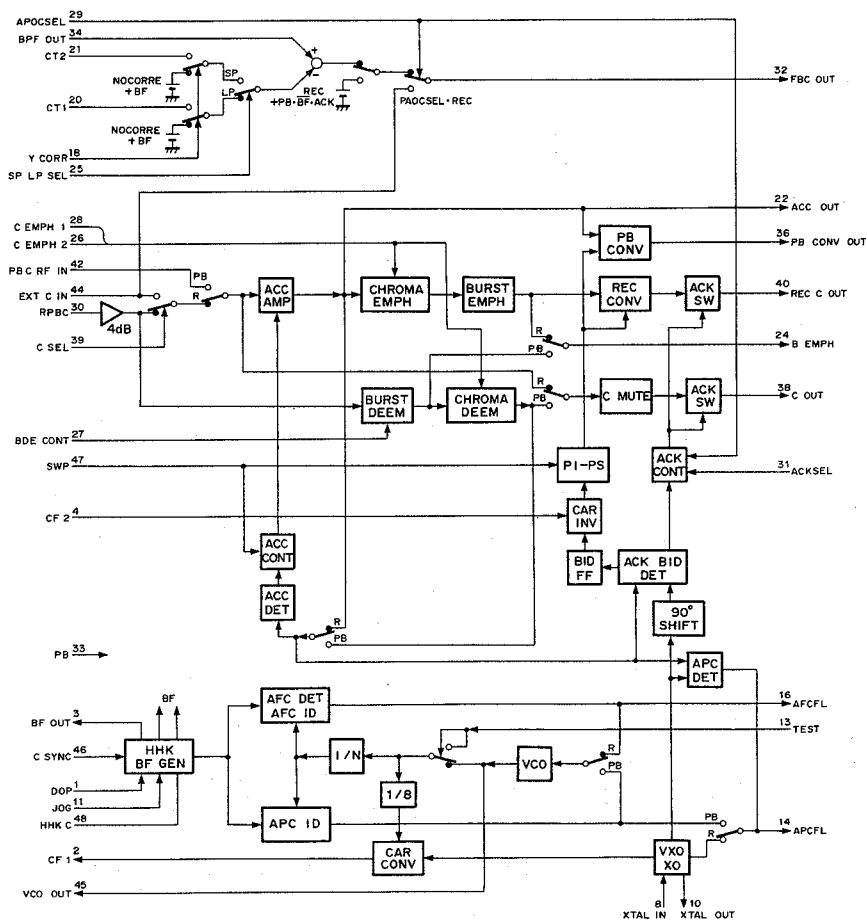
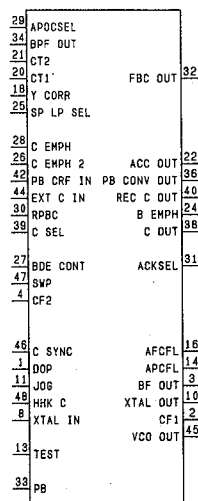


| No | I/O | SYMBOL   | No | I/O | SYMBOL     | No | I/O | SYMBOL      |
|----|-----|----------|----|-----|------------|----|-----|-------------|
| 1  | I   | DOP      | 17 | -   | Vcc2       | 33 | I   | PB          |
| 2  | O   | CF1      | 18 | I   | Y CORR P   | 34 | I   | BPF OUT     |
| 3  | O   | BF OUT   | 19 | -   | GND2       | 35 | O   | ACKBF       |
| 4  | I   | CF2      | 20 | I   | CT1        | 36 | O   | PB CONV OUT |
| 5  | -   | Vcc1     | 21 | I   | CT2        | 37 | I   | C MUTE      |
| 6  | -   | IREF     | 22 | O   | ACC OUT    | 38 | O   | C OUT       |
| 7  | -   | VREG     | 23 | -   | -          | 39 | I   | C SEL       |
| 8  | I   | XTAL IN  | 24 | O   | B EMPH OUT | 40 | O   | REC C OUT   |
| 9  | -   | IR       | 25 | I   | SP LP SEL  | 41 | I   | PAL         |
| 10 | O   | XTAL OUT | 26 | -   | C EMPH 2   | 42 | I   | PB C RF IN  |
| 11 | I   | JOG      | 27 | I   | BDECONT    | 43 | -   | GND1        |
| 12 | O   | FSC OUT  | 28 | -   | C EMPH 1   | 44 | I   | EXT C IN    |
| 13 | I   | TEST     | 29 | I   | PAOCSEL    | 45 | O   | VCO OUT     |
| 14 | -   | APCFL    | 30 | I   | RPBC       | 46 | I   | C SYNC      |
| 15 | -   | DCFB     | 31 | I   | ACKSEL     | 47 | I   | SWP         |
| 16 | -   | APCFL    | 32 | O   | FBC OUT    | 48 | -   | HHK C       |

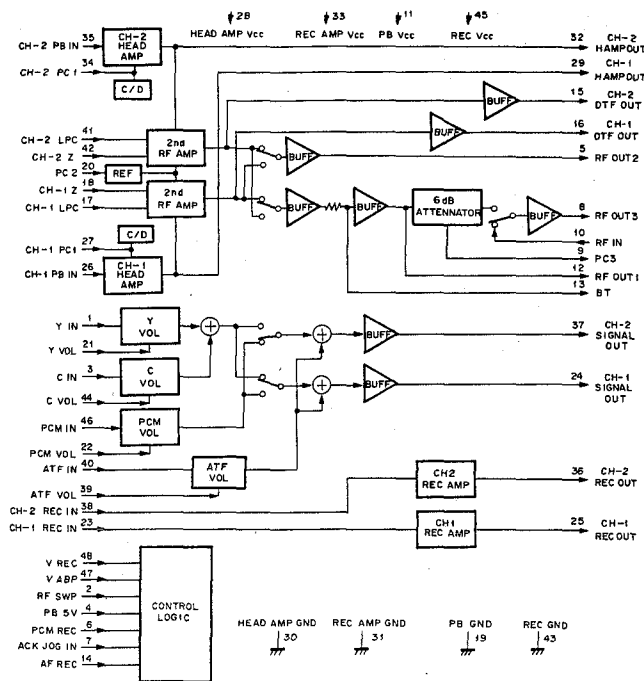
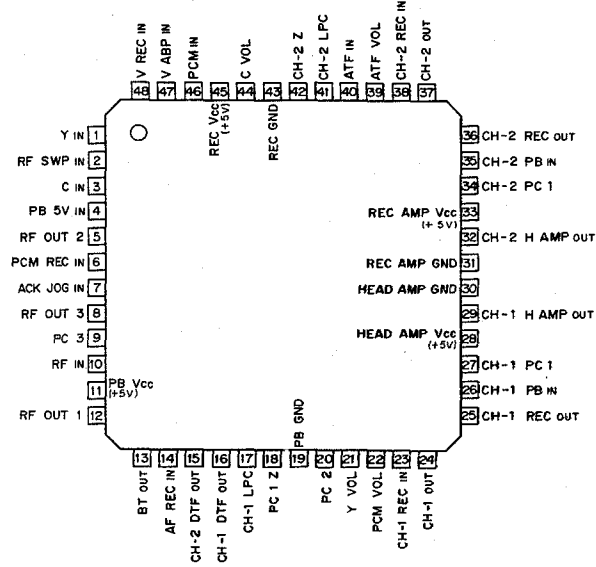
**INPUT**  
 ACK SEL : ACK SW MODE SELECT.  
 B DE CONT : ADJUSTS BURST DEEMPHASIS AMOUNT WHEN PB.  
 BPF OUT : FILTERED SIGNAL AFTER FREQUENCY CONVERT WHEN PB.  
 C MUTE : COLOR SIGNAL MUTE SELECT  
 C SEL : CHROMA SIGNAL INPUT SELECT WHEN REC.  
 C SYNC : COMPOSITE SYNC  
 CF2 : CF1 SIGNAL FILTERED BY BPF (NTSC: 4.32 MHz/PAL: 5.17 MHz)  
 CT1 : CROSSTALK (C+CD) SIGNAL FROM CX1A207A WHEN SP AND LP SEL IS LOW (LP).  
 CT2 : CROSSTALK (C+CD) SIGNAL FROM CX1A207A WHEN SP AND LP SEL IS HIGH.  
 DOP : DROPOUT DETECTION PULSE INPUT  
 EXT C IN : CHROMA RF SIGNAL WHEN REC.  
 JOG : CONTROL FOR JOG PLAYBACK  
 PAO C SEL : SETTING WHEN CAMERA REC.  
 PAL : PAL SELECT (H: PAL, L: NTSC)  
 PB : REC/PB MODE SELECT (H: PB, L: REC)  
 PB C RF IN : CHROMA RF SIGNAL WHEN PB.  
 R PB C : CHROMA SIGNAL  
 SP LP SEL : SP/LP SELECT  
 SWP : RF SW PULSE  
 TEST : TEST MODE  
 XTAL IN : REFERENCE INPUT FOR CRYSTAL OSC  
 Y CORR P : Y SIGNAL H CORRELATED PULSE FROM CX1A207A.

**OUTPUT**  
 ACC OUT : ACC AMP OUTPUT.  
 ACK BF : BF PULSE WHEN ACK.  
 B EMPH OUT : CHROMA/EMPHASIS BURST SIGNAL (WHEN REC).  
 BURST DEEMPHASIS SIGNAL (WHEN PB)  
 BURST FLAG  
 C OUT : CHROMA SIGNAL WHEN PB.  
 CF1 : CARRIER CONVERTER SIGNAL  
 FBC OUT : CHROMA SIGNAL  
 FSC OUT : fsc & DELAY LINE CLOCK  
 PB CONV OUT : FREQUENCY CONVERTED CHROMA SIGNAL WHEN PB.  
 REC C OUT : FREQUENCY CONVERTED CHROMA SIGNAL WHEN REC.  
 VCO OUT : 3781H (5.9MHz) : NTSC  
 VREG : 4.2V REGULATOR  
 XTAL OUT : REFERENCE OUTPUT FOR CRYSTAL OSC

**OTHER**  
 AFC FL : CONNECT FILTER FOR AFC  
 APC FL : CONNECT FILTER FOR APC  
 C EMPH 1 : CONNECT BPF CHROMA EMPHASIS  
 C EMPH 2 : CONNECT CHROMA EMPHASIS PHASE ADJUSTMENT COIL  
 DCFB : CONNECT FILTER FOR VCO NO ADJUSTMENT  
 HHK C : CONNECT TIME CONSTANT FOR C SYNC EQUIVALENT PULSE.  
 IR : CONNECT FOR DECOUPLING  
 IREF : EXTERNAL REFERENCE CURRENT



CXA1234AR (SONY) FLAT PACKAGE  
VIDEO RF REC/PB AMPLIFIER  
- TOP VIEW -



```

INPUT          VIDEO/RF SELECT FOR RF OUT 3
AF REC        : AFTER RECODING MODE
ATF IN        : REC ATF SIGNAL INPUT
ATF VOL       : REC ATF GAIN CONTROL
CH1 IN        : REC CHROMA INPUT
CH1 PB IN     : CH-1 HEAD AMP INPUT
CH1 REC IN    : CH-1 REC AMP INPUT
CH2 PB IN     : CH-2 HEAD AMP INPUT
CH2 REC IN    : CH-2 REC AMP INPUT
C VOL         : REC CHROMA GAIN CONTROL
CV SW         : PB ON/OFF
PCM IN        : REC PCM SIGNAL INPUT
PCM REC       : PCM AUDIO RECODING MODE
PCM VOL       : REC PCM GAIN CONTROL
RF IN         : VIDEO INPUT FOR RF OUT 3
RF SWP IN     : RF SWITCHING PULSE INPUT
V BS IN       : OVER LAP RECORDING MODE INPUT
V REC IN      : VIDEO RECODING MODE INPUT
Y IN          : REC Y INPUT
Y VOL         : REC Y GAIN CONTROL

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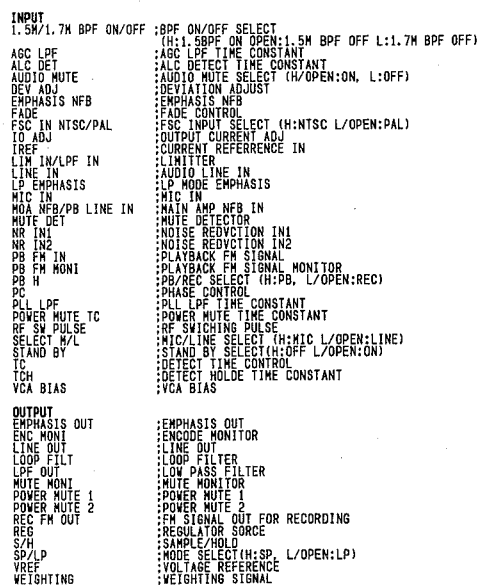
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OUTPUT
87          : BIAS TRAP FILTER
CH-1 OUT   : REC CH-1 OUTPUT
CH-1 DTF OUT : DTF CH-1 OUTPUT
CH-1 H AMP OUT : CH-1 HEAD AMP OUTPUT
CH-1 REC OUT : CH-1 REC AMP OUTPUT
CH-2 OUT     : REC CH-2 OUTPUT
CH-2 DTF OUT : DTF CH-2 OUTPUT
CH-2 H AMP OUT : CH-2 HEAD AMP OUTPUT
CH-2 REC OUT : CH-2 REC AMP OUTPUT
RF OUT 1     : RF OUTPUT FOR VIDEO
RF OUT 2     : RF OUTPUT FOR PCM
RF OUT 3     : RF OUTPUT

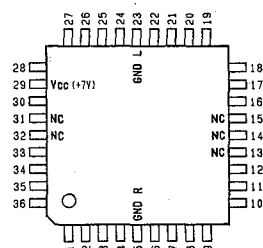
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**OTHERS**

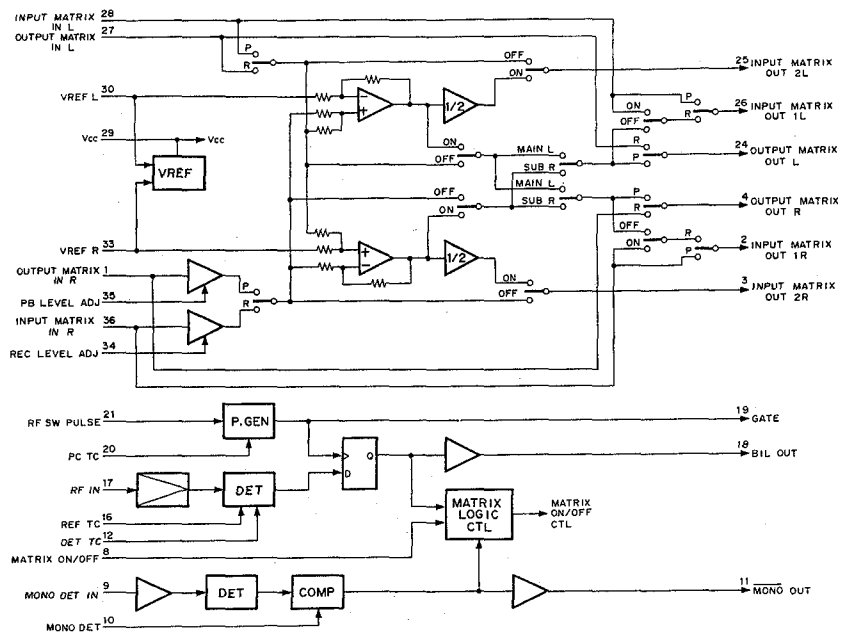
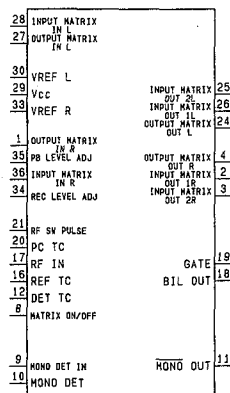
|          |   |                       |            |            |
|----------|---|-----------------------|------------|------------|
| CH-1 LPC | : | BYPASS CAPACITOR FOR  | CH-1       | HEAD AMP   |
| CH-1 PC1 | : | BYPASS CAPACITOR FOR  | CH-1       | HEAD AMP   |
| CH-1 Z   | : | LCR RESONANCE CIRCUIT |            |            |
| CH-2 LPC | : | BYPASS CAPACITOR FOR  | CH-2       | 2nd RF AMP |
| CH-2 PC1 | : | BYPASS CAPACITOR FOR  | CH-2       | HEAD AMP   |
| CH-2 Z   | : | LCR RESONANCE CIRCUIT |            |            |
| PC 2     | : | BYPASS CAPACITOR      |            |            |
| PC 3     | : | BYPASS CAPACITOR FOR  | ATTENUATER |            |



CXA1536Q (SONY)

AFM STEREO MATRIX FOR 8mm VTR  
- TOP VIEW -

| No | I/O | SIGNAL              | No | I/O | SIGNAL          | No | I/O | SIGNAL              |
|----|-----|---------------------|----|-----|-----------------|----|-----|---------------------|
| 1  | I   | OUTPUT MATRIX IN R  | 13 | -   | NC              | 25 | I   | INPUT MATRIX OUT 2L |
| 2  | I   | INPUT MATRIX OUT 1R | 14 | -   | NC              | 26 | I   | INPUT MATRIX OUT 1L |
| 3  | I   | INPUT MATRIX OUT 2R | 15 | -   | NC              | 27 | I   | OUTPUT MATRIX IN L  |
| 4  | O   | OUTPUT MATRIX OUT R | 16 | O   | REF TC          | 28 | I   | INPUT MATRIX IN L   |
| 5  | -   | GND R               | 17 | O   | RF IN           | 29 | I   | Vcc (+7V)           |
| 6  | O   | SELECT 1            | 18 | O   | BIL OUT         | 30 | I   | VREF L              |
| 7  | I   | SELECT 2            | 19 | O   | GATE            | 31 | -   | NC                  |
| 8  | O   | MATRIX ON/OFF       | 20 | -   | PC TC           | 32 | -   | NC                  |
| 9  | -   | MONO DET IN         | 21 | -   | RF SW PULSE     | 33 | I   | VREF R              |
| 10 | I   | MONO DET            | 22 | I   | PB/REC          | 34 | I   | REC LEVEL ADJ       |
| 11 | O   | MONO OUT            | 23 | -   | GND L           | 35 | I   | PB LEVEL ADJ        |
| 12 | O   | DET TC              | 24 | O   | OUTPUT MATRIX L | 36 | O   | INPUT MATRIX IN R   |

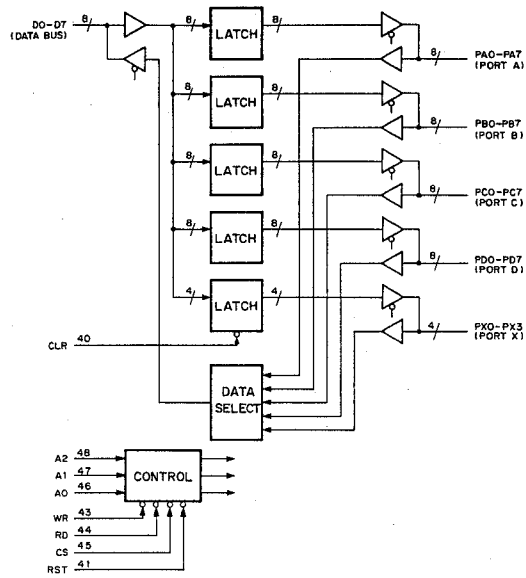
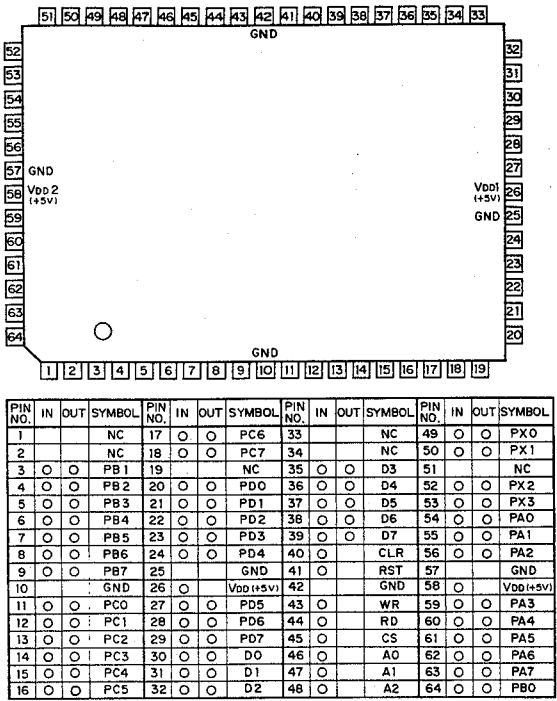




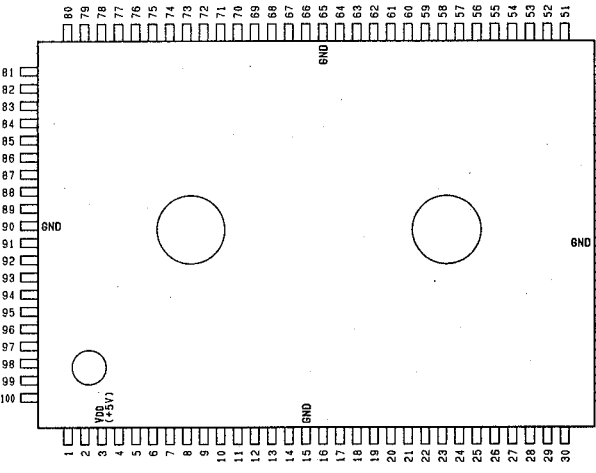
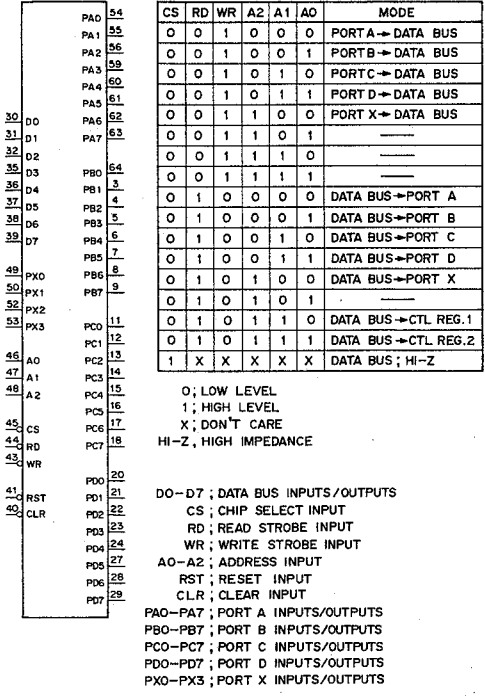




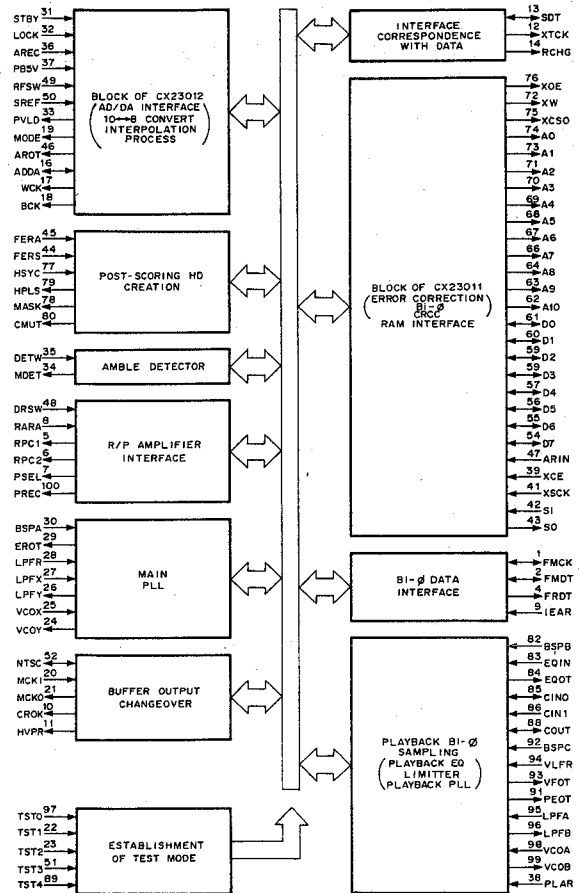
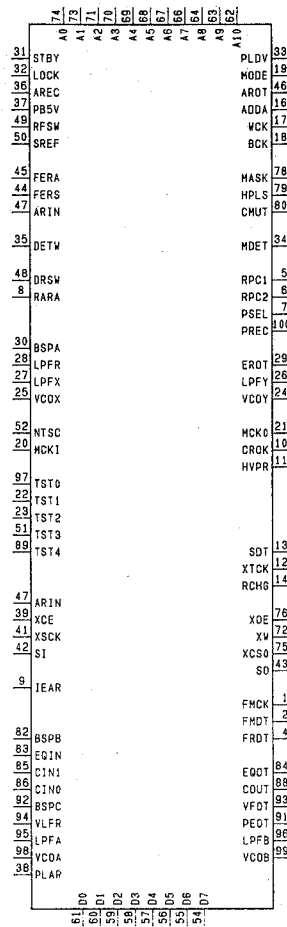
CXD1095Q (SONY) FLAT PACKAGE  
C-MOS I/O PORT EXPANDER  
- TOP VIEW -



CXD1208Q (SONY)  
C-MOS PCM AUDIO SIGNAL PROCESSOR FOR 8mm VIDEO  
- TOP VIEW -



| No | I/O | SIGNAL | No | I/O | SIGNAL | No | I/O | SIGNAL | No  | I/O | SIGNAL |
|----|-----|--------|----|-----|--------|----|-----|--------|-----|-----|--------|
| 1  | I/O | FMCK   | 26 | O   | LPFY   | 51 | I   | TST3   | 76  | O   | XOE    |
| 2  | I/O | FMOT   | 27 | I   | LPFX   | 52 | I   | NTSC   | 77  | I   | HSYC   |
| 3  | -   | VDD    | 28 | I   | LPFR   | 53 | -   | VDD    | 78  | O   | MASK   |
| 4  | O   | FRDT   | 29 | O   | EROT   | 54 | I/O | D7     | 79  | O   | HPLS   |
| 5  | O   | RPC1   | 30 | I   | BSPA   | 55 | I/O | D6     | 80  | O   | CNUT   |
| 6  | O   | RPC2   | 31 | I   | STBY   | 56 | I/O | D5     | 81  | I   | AYDD   |
| 7  | O   | PSEL   | 32 | I   | LOCK   | 57 | I/O | D4     | 82  | I   | BSPB   |
| 8  | I   | RARA   | 33 | O   | PVLD   | 58 | I/O | D3     | 83  | I   | EQIN   |
| 9  | I   | LEAR   | 34 | O   | MDET   | 59 | I/O | D2     | 84  | O   | EQOT   |
| 10 | O   | CROK   | 35 | I   | DETW   | 60 | I/O | D1     | 85  | I   | CINI   |
| 11 | O   | HYPR   | 36 | I   | AREC   | 61 | I/O | D0     | 86  | I   | CINO   |
| 12 | O   | XTCK   | 37 | I   | PBSV   | 62 | O   | A10    | 87  | I   | AVSS   |
| 13 | I/O | SDT    | 38 | I   | PLAR   | 63 | O   | A9     | 88  | O   | COUT   |
| 14 | O   | RCHG   | 39 | I   | XCE    | 64 | O   | A8     | 89  | I   | TST4   |
| 15 | -   | GND    | 40 | -   | GND    | 65 | -   | GND    | 90  | -   | GND    |
| 16 | I/O | ADDA   | 41 | I   | XSCK   | 66 | O   | A7     | 91  | O   | PEOT   |
| 17 | O   | VCK    | 42 | I   | SI     | 67 | O   | A6     | 92  | I   | BSPC   |
| 18 | O   | BCK    | 43 | O   | SO     | 68 | O   | A5     | 93  | O   | VFOT   |
| 19 | O   | MODE   | 44 | I   | FERS   | 69 | O   | A4     | 94  | I   | VLFR   |
| 20 | I   | MCK1   | 45 | I   | FERA   | 70 | O   | A3     | 95  | I   | LPFA   |
| 21 | O   | MCK0   | 46 | O   | AROT   | 71 | O   | A2     | 96  | O   | LPFB   |
| 22 | I   | TST1   | 47 | I   | ARIN   | 72 | O   | XW     | 97  | I   | TST0   |
| 23 | I   | TST2   | 48 | I   | DRSV   | 73 | O   | A1     | 98  | I   | VCOA   |
| 24 | O   | VCOY   | 49 | I   | RFSW   | 74 | O   | A0     | 99  | O   | VCOB   |
| 25 | I   | VCOX   | 50 | I   | SREF   | 75 | O   | XCS0   | 100 | O   | PREC   |



**INPUT**

- AREC : AFTER RECODING SETTING
- ARIN : PCM AREA
- BSPA : LPF OP AMP BIAS FOR MAIN PLL
- BSPB : LINEAR CIRCUIT BIAS
- BSPC : PB PLL LINEAR BIAS
- CINO : PB LIMITER REFERENCE LEVEL
- CINI : PB LIMITER SIGNAL
- DETW : AMBLE DETECTION AREA
- DRSW : RF SWITCHING PULSE FOR CX1202
- EQIN : PB EQUALIZER
- FERA : PERS VIDEO MASK AREA
- FERS : FLYING ERASE AREA
- HSYC : COMPOSITE SYNC
- IEAR : INDEX WRITE/ERASE AREA
- LOCK : CXD1208 ACTIVE INPUT
- LPFA : LPF FOR PB PLL
- LPFB : LPF OP AMP(+) FOR MAIN PLL
- LPFX : LPF FOR MAIN PLL
- MCKI : MAIN CLOCK (736 FH)
- NTST : NTSC/CCIR SETTING
- PBSV : CXD1208 REC/PB SETTING
- PLAR : PB PLL ACTIVE AREA
- RARA : PCM REC AREA
- RFSW : RF SWITCHING PULSE
- SI : ID REC DATA
- SREF : SERVO REFERENCE (50/60Hz)
- STBY : POWER DOWN/INITIALIZE
- TST0-TST4 : TEST MODE SETTING PIN
- VCOA : PB PLL VCO INPUT SIDE VCO FOR PB PLL
- VCOX : MAIN PLL VCO INPUT SIDE
- VLFER : LPF OP AMP (+) FOR PB PLL
- XCE : ID TRANSFER ENABLE
- XSCX : ID TRANSFER CLOCK

**OUTPUT**

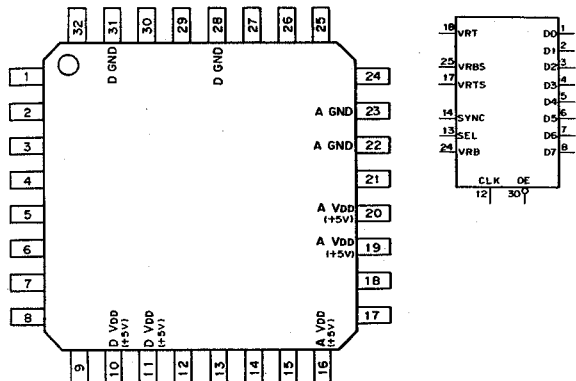
- AP-A10 : 64K SRAM ADDRESS BUS
- AROT : PCM AREA
- BCK : ADDA TRANSFER CLOCK
- CMUT : CHROMA MUTE AREA WHEN AFTER RECORDING
- CROK : PB LIMITER
- EQOT : CROK OK PULSE
- EROT : PB EQUALIZER
- FRDT : MAIN PLL PHASE COMPARATOR
- HPLS : BI-8 REC DATA
- HYPR : HD WHEN AFTER RECORDING
- MCKO : MAIN PLL DIVISION
- LPFY : LPF FOR PB PLL
- LPFX : LPF FOR MAIN PLL
- MASK : Y MASK AREA WHEN AFTER RECORDING
- MODE : MAIN PLL
- MDET : AMBLE DETECTION (A B)
- PCHE : PCM SYSTEM REC/PB MODE
- PREC : RAM AREA SELECT SIGNAL
- PSEL : PB PLL PHASE COMPARATOR
- PVLD : PCM REC AREA FOR CX20034
- RPC1 : CXA1202 INPUT SELECT SIGNAL
- RPC2 : CXA1202 1CH REC/PB CONTROL
- SD : CXA1202 2CH REC/PB CONTROL
- VCOB : PB ID DATA
- VCOY : VCO FOR PB PLL
- VCOZ : MAIN PLL VCO OUTPUT SIDE
- VFOT : VOLTAGE FOLLOWER FOR PB PLL
- VCK : ADD/DAC L/R SELECT SIGNAL
- XCSO : 64K SRAM ADDRESS BUS
- XOE : 64K SRAM OUTPUT ENABLE
- XTCK : SDT TRANSFER CLOCK
- XW : 64K SRAM WRITE ENABLE

**INPUT/OUTPUT**

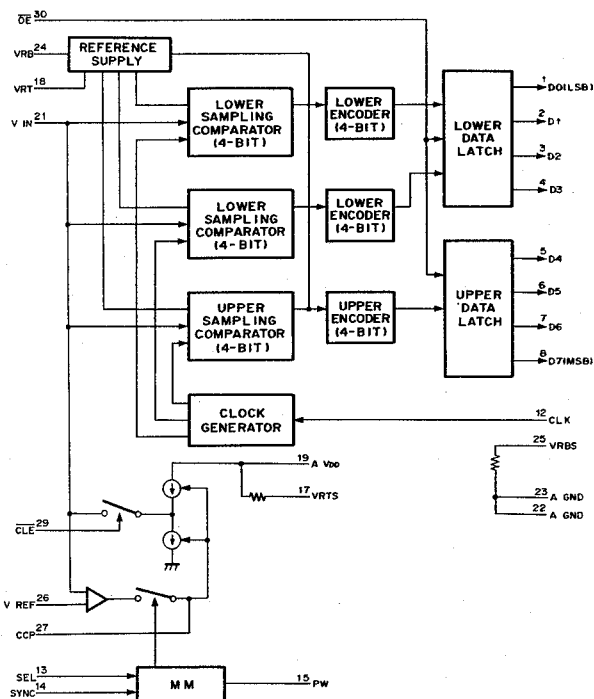
- ADDA : ADC/DAC DATA
- DD-D10 : 64K SRAM DATA BUS
- FMCK : BI-8 DATA TRANSFER CLOCK
- FMUT : BI-8 DATA
- SDT : 8-BIT DATA

# CXD1176Q (SONY)

C-MOS 8-BIT 20MSPS VIDEO A/D CONVERTER WITH CLAMP FUNCTION  
- TOP VIEW -

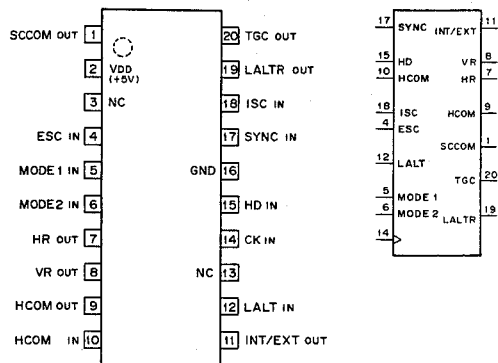


| No. | I/O | SIGNAL  | No. | I/O | SIGNAL | No. | I/O | SIGNAL | No. | I/O | SIGNAL |
|-----|-----|---------|-----|-----|--------|-----|-----|--------|-----|-----|--------|
| 1   | 0   | D0(LSB) | 9   | -   | N.C.   | 17  | 0   | VRTS   | 25  | 0   | VRTS   |
| 2   | 0   | D1      | 10  | -   | D VDD  | 18  | 0   | VRT    | 26  | 1   | VREF   |
| 3   | 0   | D2      | 11  | -   | D VDD  | 19  | -   | A VDD  | 27  | I/O | CCP    |
| 4   | 0   | D3      | 12  | 1   | CLK    | 20  | -   | A VDD  | 28  | -   | D GND  |
| 5   | 0   | D4      | 13  | 1   | SEL    | 21  | 1   | V IN   | 29  | 1   | CLE    |
| 6   | 0   | D5      | 14  | 1   | SYNC   | 22  | -   | A GND  | 30  | 0   | OE     |
| 7   | 0   | D6      | 15  | I/O | PW     | 23  | -   | A GND  | 31  | -   | D GND  |
| 8   | 0   | D7(MSB) | 16  | -   | A VDD  | 24  | 0   | VRB    | 32  | -   | N.C.   |



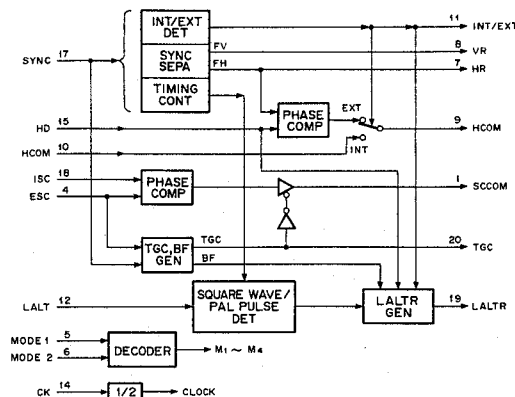
# CXD1216M (SONY) FLAT PACKAGE

C-MOS GENLOCK DRIVER  
- TOP VIEW -



| INPUT       | MODE | SYSTEM                              |
|-------------|------|-------------------------------------|
| MODE1 MODE2 | M1   | PAL-VBS                             |
| 0 0         | M2   | PALM-VBS                            |
| 0 1         | M3   | PAL-SECAM-VS/SC/LALT                |
| 1 1         | M4   | NTSC-VBS,NTSC-VS/SC PALM-VS/SC/LALT |

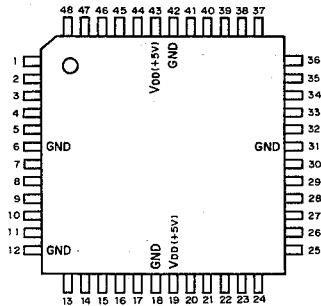
0: LOW LEVEL  
1: HIGH LEVEL



**INPUT**  
CK : 4fsc CLOCK INPUT  
ESC : SC/COLOR BURST  
HCOM : PHASE COMPARE FROM CXD1217  
HD : H DRIVE FROM CXD1217  
ISC : SUBCARRIER FROM CXD1217  
LALT : LALT FROM REFERENCE SIGNAL GENERATOR  
MODE1,2 : SYSTEM SELECT  
SYNC : SYNC FROM REFERENCE SIGNAL GENERATOR

**OUTPUT**  
HCOM : PHASE COMPARE HR WITH HD  
HR : fh OF SYNC SEPARATE  
INT/EXT : INTERNAL/EXTERNAL SPECIFIED  
LALTR : LINE CHANGE RESET  
SCCOM : PHASE COMPARE ESC WITH ISC  
TGC : TRISTATE CONTROL  
VR : fv OF SYNC SEPARATE

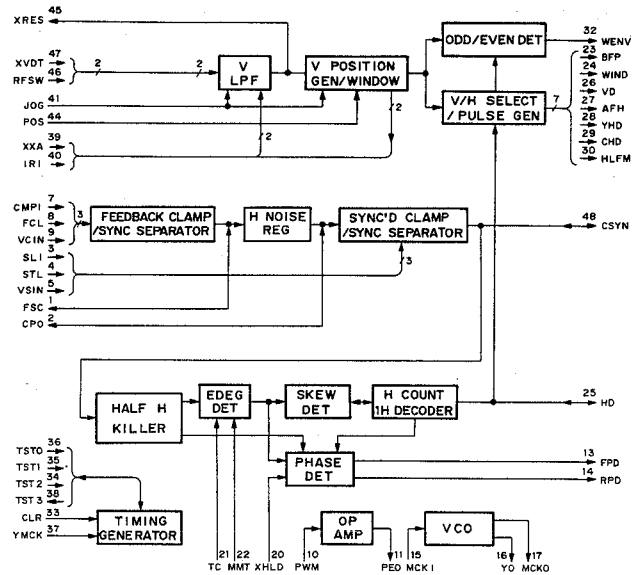
## CXD1229Q (SONY) FLAT PACKAGE

CMOS AUTOMATIC FREQUENCY CONTROL (AFC) / SYNC SEPARATOR  
- TOP VIEW -

PIN ASSIGNMENT

(V<sub>DD</sub> = +5V)

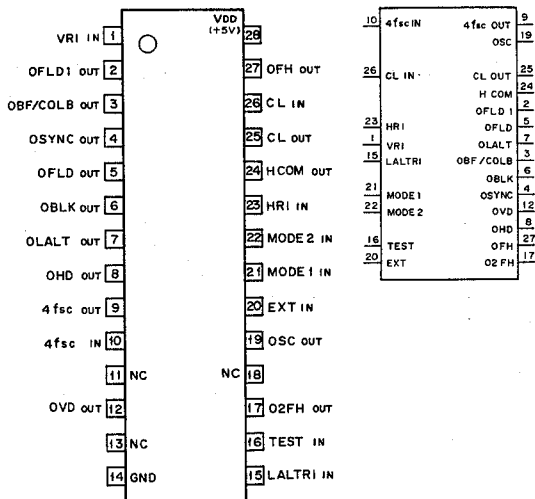
| PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|--------|
| 1       | I/O | FCS    | 13      | O   | FPD    | 25      | O   | HD     | 37      | I   | YMCK   |
| 2       | I/O | CPO    | 14      | O   | RPD    | 26      | O   | VD     | 38      | O   | TST3   |
| 3       | I   | SLI    | 15      | I   | MCKI   | 27      | O   | AFH    | 39      | I/O | XXA    |
| 4       | I   | STL    | 16      | O   | YO     | 28      | O   | YHD    | 40      | I/O | IRI    |
| 5       | I   | VSIN   | 17      | O   | MCKO   | 29      | O   | CHD    | 41      | I   | JOG    |
| 6       | -   | GND    | 18      | -   | GND    | 30      | O   | HLFH   | 42      | -   | GND    |
| 7       | I   | CMPI   | 19      | -   | VDD    | 31      | -   | GND    | 43      | -   | VDD    |
| 8       | I   | FCL    | 20      | I   | XHLD   | 32      | O   | WEVN   | 44      | I   | POS    |
| 9       | I   | VCIN   | 21      | O   | TC     | 33      | I   | CLR    | 45      | O   | RFSW   |
| 10      | I   | PWM    | 22      | I   | MMT    | 34      | I   | TST2   | 46      | I   | YVDT   |
| 11      | O   | PEO    | 23      | O   | BFP    | 35      | I   | TST1   | 47      | I   | XRES   |
| 12      | -   | GND    | 24      | O   | WIND   | 36      | I   | TST0   | 48      | O   | CSYN   |



|    |      |    |      |  |      |   |
|----|------|----|------|--|------|---|
| 9  | VCIN | 48 | CSYN | INPUT  | CLR  | : DIRECT CLEAR INPUT                    |
| 8  | FCL  | 1  | FSC  | : FEED BACK CLAMP SLICE LEVEL INPUT                | CMPI | : FEED BACK CLAMP SYNC CHIP LEVEL INPUT |
| 7  | CMPI | 2  | CPO  | : REFERENCE CONTROL INPUT                          | JOG  | : CLOCK (VCO) INVERTER INPUT            |
| 6  | VSIN | 15 | MCKI | : MONO MULTI TEST PIN (H: NORMAL) INPUT            | MMT  | : PHASE REFERENCE SELECT                |
| 5  | STL  | 16 | YO   | : OP AMP INPUT                                     | PWM  | : RF SW PULSE INPUT                     |
| 4  | SLI  | 17 | MCKO | : SYNC CLAMP SLICE LEVEL INPUT                     | RPD  | : SYNC CLAMP SYNC CHIP LEVEL INPUT      |
| 3  | SLI  | 18 | STL  | : L: NORMAL/H: TEST MODE INPUT                     | TST0 | : AFC LOCK PHASE COARSE ADJUST INPUTS   |
| 20 | XHLD | 25 | HD   | : FEED BACK CLAMP VIDEO INPUT                      | VSIN | : SYNC CLAMP VIDEO INPUT                |
| 21 | TC   | 13 | FPD  | : H: AFC ERROR ACTIVE/L: AFC ERROR HOLD INPUT      | XVDT | : V DETECT COMPOSITE SYNC INPUT         |
| 22 | MMT  | 14 | RPD  | : MASTER CLOCK INPUT                               | YMCK | : AFC MAIN LOOP PHASE ERROR OUTPUT      |
| 10 | PWM  | 10 | PWM  | : L: NORMAL/H: TEST MODE OUTPUT                    | VD   | : VERTICAL SYNC DETECT OUTPUT           |
| 11 | PEO  | 11 | PEO  | : WRITE EVEN/ODD FIELD DETECT OUTPUT               | WIND | : WINDOW COMPARE OUTPUT FOR V-PLL       |
| 15 | MCKI | 15 | MCKI | : XRES   | XRES | : V DETECT LPF OUTPUT                   |
| 16 | YO   | 16 | YO   | : CLOCK (VCO) INVERTER OUTPUT (910f <sub>H</sub> ) | YHD  | : PEDESTAL CLAMP TIMING OUTPUT          |
| 17 | MCKO | 17 | MCKO | : OP AMP OUTPUT                                    |      |   |
| 33 | CLR  | 33 | CLR  | : AFC H DRIVE OUTPUT                               |      |   |
| 37 | AFH  | 37 | AFH  | : BURST FLAG PULSE OUTPUT                          |      |   |
| 36 | YMCK | 36 | YMCK | : H SYNC OUTPUT FOR BURST DETECT                   |      |   |
| 35 | TST0 | 35 | TST0 | : AFC SUB LOOP PHASE ERROR OUTPUT                  |      |   |
| 34 | TST1 | 34 | TST1 | : 1/2f <sub>H</sub> (≈ 7.5 kHz) OUTPUT             |      |   |
| 33 | TST2 | 33 | TST2 | : CLOCK (VCO) INVERTER OUTPUT (910f <sub>H</sub> ) |      |   |
| 32 | TST3 | 32 | TST3 | : OP AMP OUTPUT                                    |      |   |
| 32 | WENV | 32 | WENV | : AFC MAIN LOOP PHASE ERROR OUTPUT                 |      |   |
| 23 | BFP  | 23 | BFP  | : L: NORMAL/H: TEST MODE OUTPUT                    |      |   |
| 24 | WIND | 24 | WIND | : VERTICAL SYNC DETECT OUTPUT                      |      |   |
| 26 | VD   | 26 | VD   | : WRITE EVEN/ODD FIELD DETECT OUTPUT               |      |   |
| 27 | AFH  | 27 | AFH  | : WINDOW COMPARE OUTPUT FOR V-PLL                  |      |   |
| 28 | YHD  | 28 | YHD  | : XRES   |      |   |
| 29 | CHD  | 29 | CHD  | : CLOCK (VCO) INVERTER OUTPUT                      |      |   |
| 30 | HLFH | 30 | HLFH | : PEDESTAL CLAMP TIMING OUTPUT                     |      |   |

**INPUT/OUTPUT**  
CPO : CLAMP PULSE INPUT/OUTPUT  
CSYN : CLAMP SYNC SEPARATE INPUT/OUTPUT  
FCS : FEED BACK CLAMP SYNC SEPARATE INPUT/OUTPUT  
HD : AFC H DIRECT INPUT/OUTPUT  
IRI : MONITOR PIN FOR TEST INPUT/OUTPUT  
TC : AFC LOCK PHASE FINE ADJUST INPUT/OUTPUT  
XXA : MONITOR PIN FOR TEST INPUT/OUTPUT

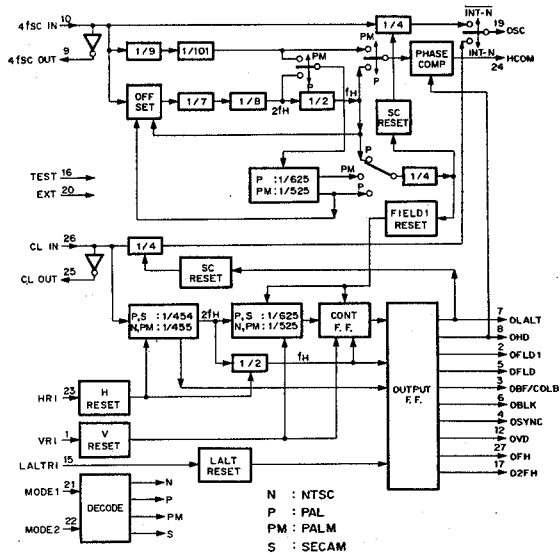
CXD1217M (SONY) FLAT PACKAGE  
C-MOS SYNC GENERATOR  
- TOP VIEW -



| SYSTEM | 4fsc     | CLOCK |
|--------|----------|-------|
| NTSC   | 910H     | 910H  |
| PAL    | 1135H+2f | 908H  |
| PALM   | 909H     | 910H  |
| SECAM  | —        | 908H  |

| MODE1 | MODE2 | SYSTEM |
|-------|-------|--------|
| 0     | 0     | NTSC   |
| 0     | 1     | SECAM  |
| 1     | 0     | PALM   |
| 1     | 1     | PAL    |

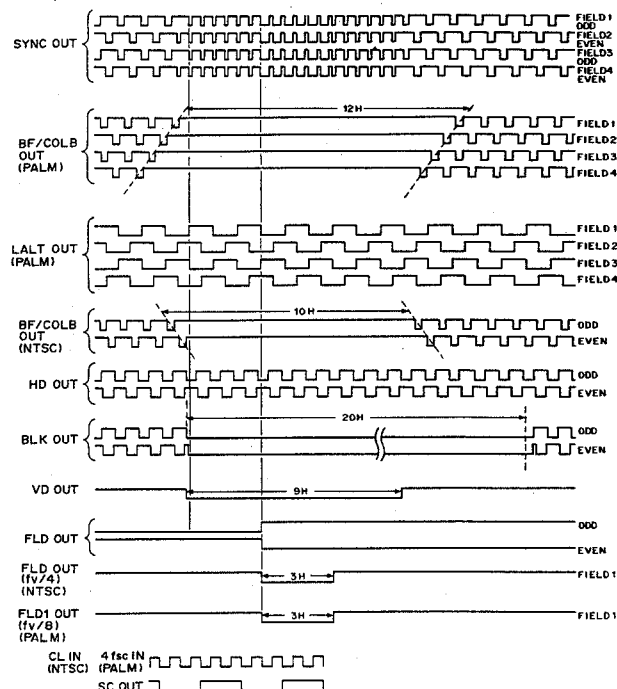
0: LOW LEVEL  
1: HIGH LEVEL



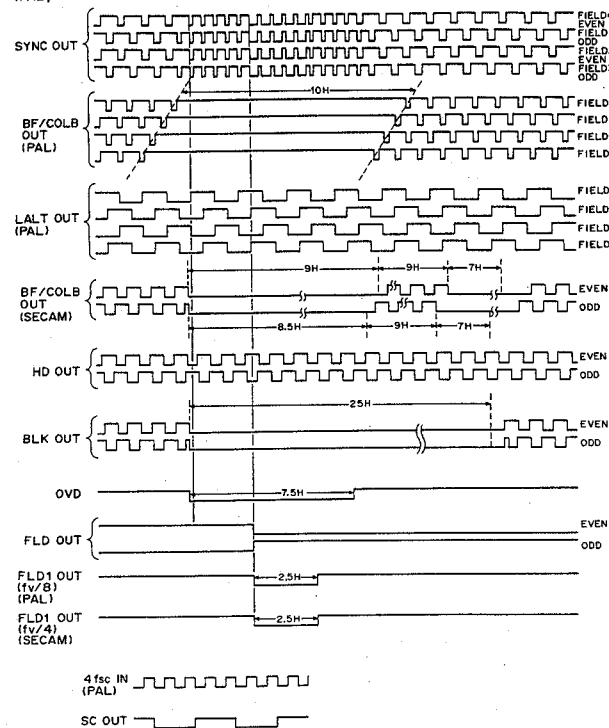
INPUT  
4fsc IN : 4fsc INPUT  
CL IN : CLOCK INPUT  
EXT : SYNC MODE SELECT  
(L: INTERNAL/H: EXTERNAL)  
HRI : H RESET  
LALTRI : LINE CHANGE RESET  
MODE1,2 : SYSTEM SELECT  
VRI : V RESET

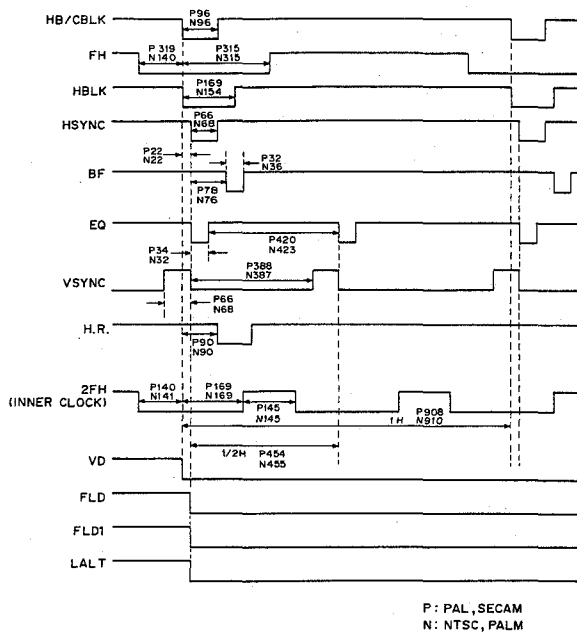
OUTPUT  
4fsc OUT : 4fsc OUTPUT  
CL OUT : CLOCK OUTPUT  
HCOM : PHASE COMPARATOR  
O2FH : 2FH OUTPUT  
OBF/COLB : BURST FLAG/COLOR BLANKING  
OBLK : COMPOSITE BLANKING  
OFH : H FREQUENCY  
OFLD : EVEN, ODD  
OFLD1 : FIELD1  
OHD : H DRIVE  
OLALT : LINE CHANGE  
OSC : SUBCARRIER  
OSYNC : COMPOSITE SYNC  
OVD : V DRIVE

(NTSC, PALM)

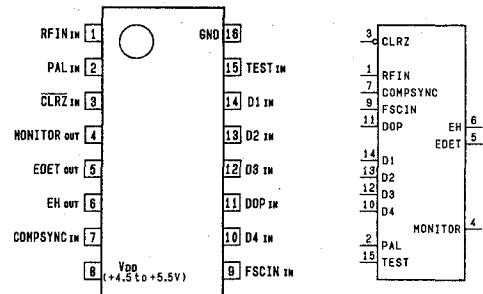


(PAL, SECAM)





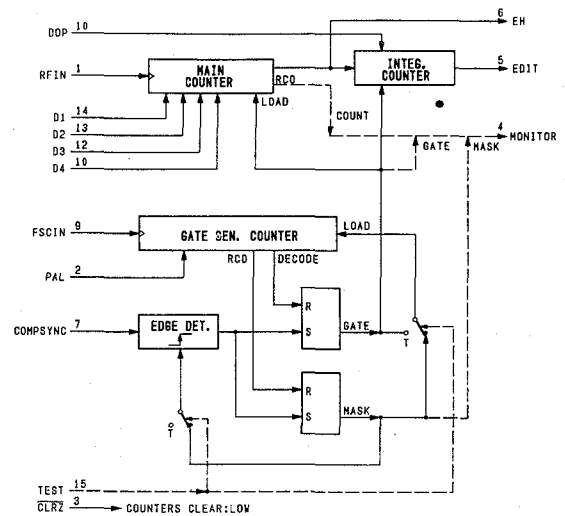
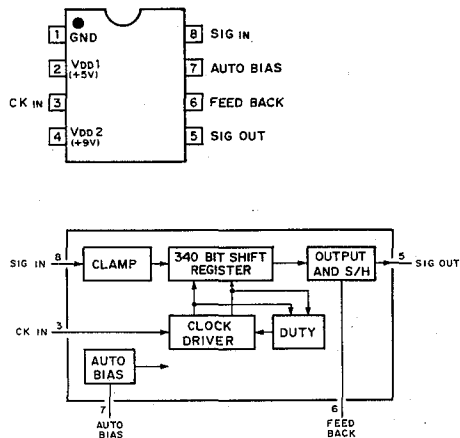
CXD2107M (SONY) FLAT PACKAGE  
CMOS DEFINITION DETECTOR  
- TOP VIEW -



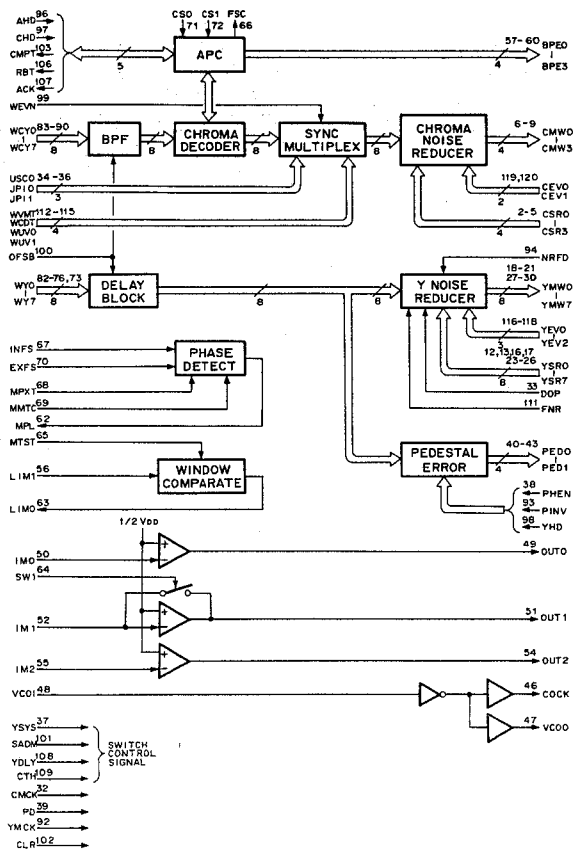
INPUT  
CLRZ : CLEAR SIGNAL INPUT FOR INTERNAL COUNTERS  
COMPSYNC: COMPOSITE SYNC INPUT  
D1-D4 : LOAD DATA INPUTS FOR MAIN COUNTER (D0=HIGH, FIXED DATA)  
DOP : DROPOUT COMPENSATION PULSE INPUT  
FSCIN : COLOR SUBCARRIER INPUT. NTSC=3.579545MHZ. PAL=4.433619MHZ  
PAL : OPERATION MODE SELECT INPUT. HIGH=PAL, LOW=NTSC  
RFIN : PLAYBACK Y RF SIGNAL INPUT  
TEST : TEST CONTROL INPUT. NORMAL=LOW  
E\* : EXTENDED DEFINITION

OUTPUT  
EDET : E\* MODE DETECTION OUTPUT. CONTINUOUS 16H  
EH : E\* MODE DETECTION OUTPUT. DISTINGUISH IN 1H  
MONITOR : MONITOR OUTPUT OF COUNT, GATE, AND MASK PULSES  
NOTE : E\* : EXTENDED DEFINITION

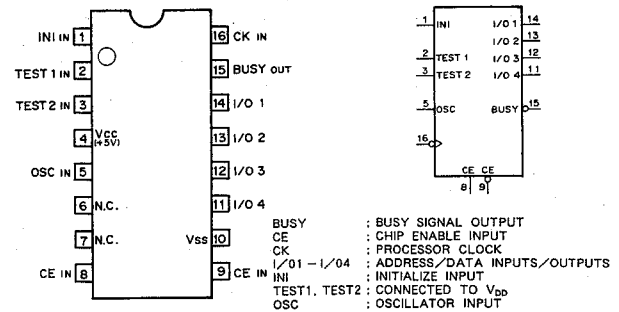
CXL5502M (SONY) FLAT PACKAGE  
CMOS CCD1H DELAY LINE (NTSC)  
- TOP VIEW -





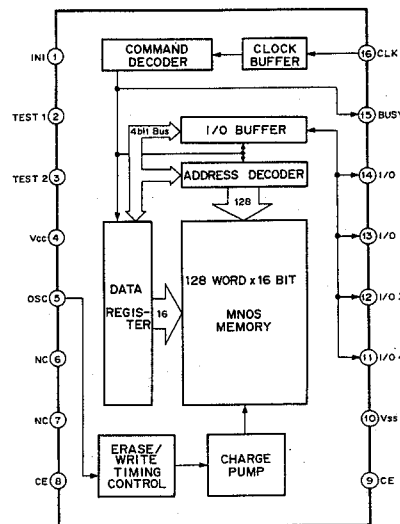


CXK1009P (SONY)  
MNOS 2048BIT (128x16) EPROM  
- TOP VIEW -



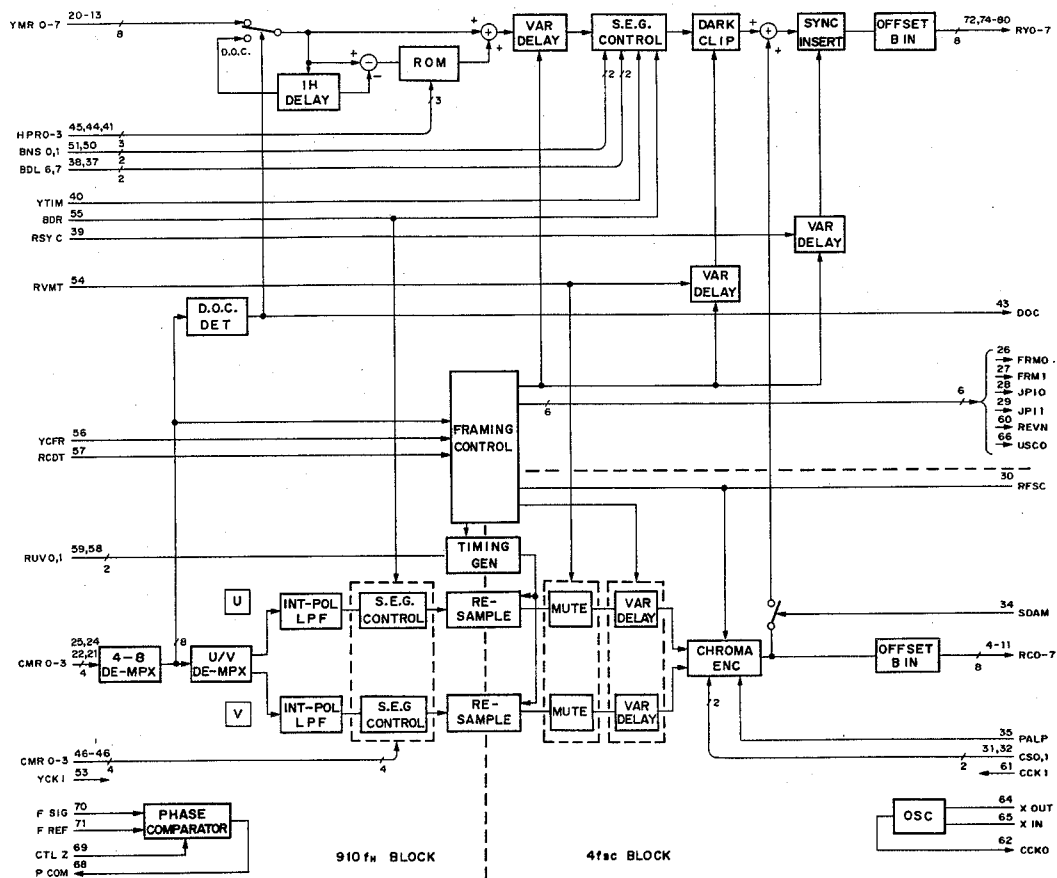
| INPUT |      |      |      |      | FUNCTION     |
|-------|------|------|------|------|--------------|
| CE    | I/O1 | I/O2 | I/O3 | I/O4 |              |
| 0     | 0    | 0    | 1    | 0    | READ         |
| 0     | 1    | 0    | 1    | 0    | WRITE        |
| 0     | X    | X    | 0    | 0    | NO OPERATION |
| 0     | X    | X    | 0    | 1    | NO OPERATION |
| 0     | X    | X    | 1    | 1    | NO OPERATION |
| 1     | X    | X    | X    | X    | NO OPERATION |

0 : LOW LEVEL  
 1 : HIGH LEVEL  
 X : DON'T CARE

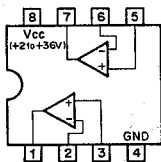




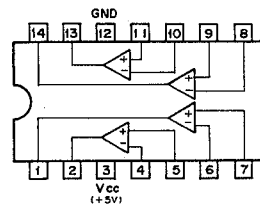




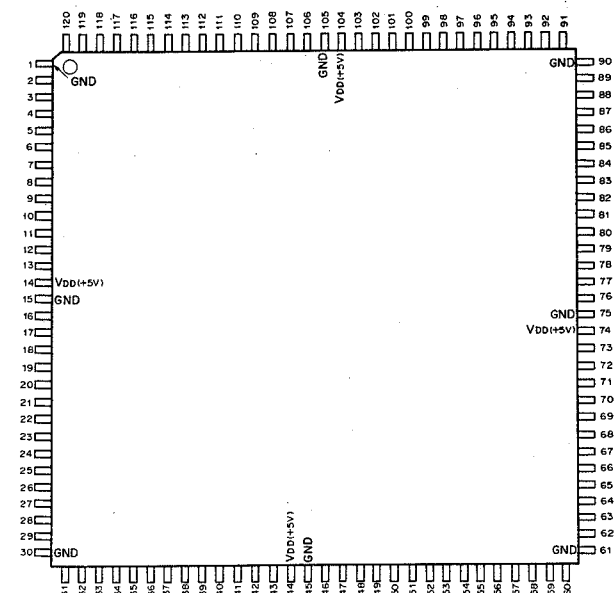
LM2903PS (TI) FLAT PACKAGE  
UPC393G2 (NEC) FLAT PACKAGE  
DUAL VOLTAGE COMPARATORS  
- TOP VIEW -



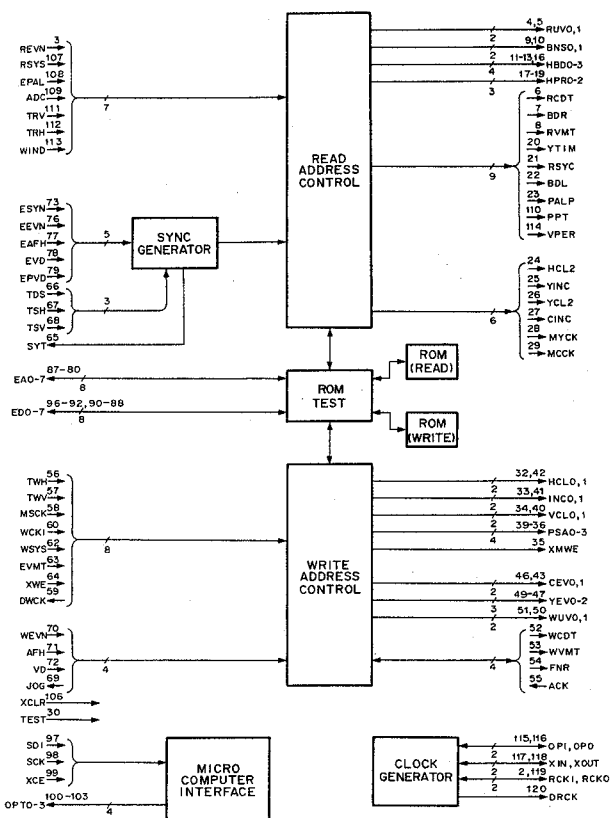
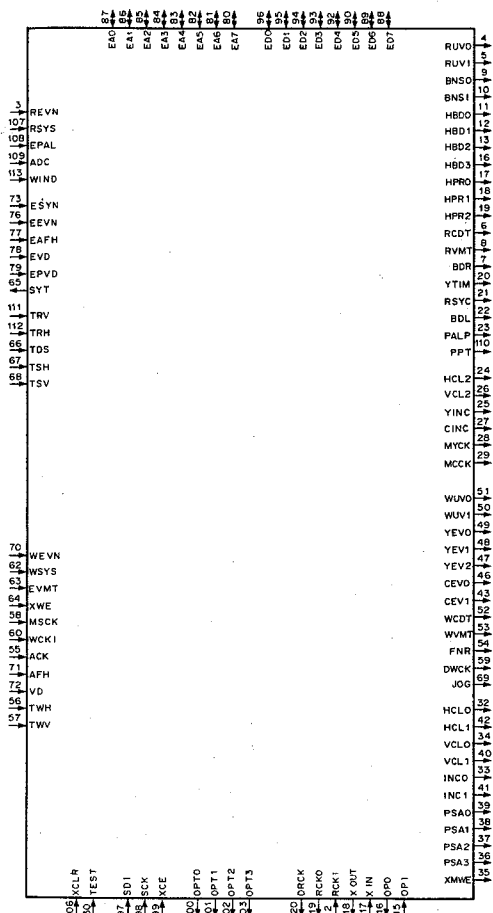
LM339D (TI) FLAT PACKAGE  
UPC339C (NEC)  
QUAD COMPARATORS  
- TOP VIEW -



CXD1228Q (SONY) FLAT PACKAGE  
CMOS MEMORY ADDRESS CONTROLLER  
- TOP VIEW -



| PIN NO. | I/O | SYMBOL   | PIN NO. | I/O | SYMBOL   | PIN NO. | I/O | SYMBOL   | PIN NO. | I/O | SYMBOL   |
|---------|-----|----------|---------|-----|----------|---------|-----|----------|---------|-----|----------|
| 1       | -   | GND      | 31      | -   | GND      | 61      | -   | GND      | 91      | -   | GND      |
| 2       | I   | RCK1     | 32      | O   | HCL0     | 62      | I   | WSYS     | 92      | I/O | ED4      |
| 3       | I   | REVN     | 33      | O   | INC0     | 63      | I   | EVMT     | 93      | I/O | ED3      |
| 4       | O   | RUV0     | 34      | O   | VCL0     | 64      | I   | XWE      | 94      | I/O | ED2      |
| 5       | O   | RUV1     | 35      | O   | XWME     | 65      | O   | SYT      | 95      | I/O | ED1      |
| 6       | O   | RCDT     | 36      | O   | PSA3     | 66      | I   | TDS      | 96      | I/O | ED0      |
| 7       | O   | BDR      | 37      | O   | PSA2     | 67      | I   | TSH      | 97      | I   | SD1      |
| 8       | O   | RVMT     | 38      | O   | PSA1     | 68      | I   | TSV      | 98      | I   | SDK      |
| 9       | O   | BNS0     | 39      | O   | PSA0     | 69      | O   | JOG      | 99      | I   | XCE      |
| 10      | O   | BNS1     | 40      | O   | VCL1     | 70      | I   | WEVN     | 100     | O   | OPT0     |
| 11      | O   | HBD0     | 41      | O   | INC1     | 71      | I   | AFH      | 101     | O   | OPT1     |
| 12      | O   | HBD1     | 42      | O   | HCL1     | 72      | I   | VD       | 102     | O   | OPT2     |
| 13      | O   | HBD2     | 43      | O   | CEV1     | 73      | I   | ESYN     | 103     | O   | OPT3     |
| 14      | -   | VDD(+5V) | 44      | -   | VDD(+5V) | 74      | -   | VDD(+5V) | 104     | -   | VDD(+5V) |
| 15      | -   | GND      | 45      | -   | GND      | 75      | -   | GND      | 105     | -   | GND      |
| 16      | O   | HBD3     | 46      | O   | CEV0     | 76      | I   | EEVN     | 106     | I   | XCLR     |
| 17      | O   | HPR0     | 47      | O   | YEV2     | 77      | I   | EAFH     | 107     | I   | RSYS     |
| 18      | O   | HPR1     | 48      | O   | YEV1     | 78      | I   | EVD      | 108     | I   | EPAL     |
| 19      | O   | HPR2     | 49      | O   | YEV0     | 79      | I   | EPVD     | 109     | I   | ADC      |
| 20      | O   | YTIM     | 50      | O   | WUV1     | 80      | I/O | EA7      | 110     | O   | PPT      |
| 21      | O   | RSYC     | 51      | O   | WUV0     | 81      | I/O | EA6      | 111     | I   | TRV      |
| 22      | O   | BDL      | 52      | O   | WCDT     | 82      | I/O | EA5      | 112     | I   | TRH      |
| 23      | O   | PALP     | 53      | O   | WVMT     | 83      | I/O | EA4      | 113     | I   | WIND     |
| 24      | O   | HCL2     | 54      | O   | FNR      | 84      | I/O | EA3      | 114     | O   | VPER     |
| 25      | O   | YINC     | 55      | I   | ACK      | 85      | I/O | EA2      | 115     | I   | OPI      |
| 26      | O   | VCL2     | 56      | I   | TWH      | 86      | I/O | EA1      | 116     | O   | OPO      |
| 27      | O   | CINC     | 57      | I   | TWV      | 87      | I/O | EA0      | 117     | I   | XIN      |
| 28      | O   | MYCK     | 58      | I   | MSCK     | 88      | I/O | ED7      | 118     | O   | XOUT     |
| 29      | O   | MCCK     | 59      | O   | DWCK     | 89      | I/O | ED6      | 119     | O   | RCKO     |
| 30      | I   | TST      | 60      | I   | WCKI     | 90      | I/O | ED5      | 120     | O   | DRCK     |



|                    |  |             |                                       |
|--------------------|--|-------------|---------------------------------------|
| INPUT              |  | OUTPUT      |                                       |
| ACK                | : CLOCK INPUT FOR APC (H: B/W MODE, L: COLOR MODE) | BDL         | : Y BORDER LEVEL OUTPUT               |
| ADC                | : CHROMA ADDRESS CONTROL INPUT                     | BDR         | : BORDER OUTPUT                       |
| AFH                | : AFC H DRIVE INPUT                                | BNS0, 1     | : SOLARIZATION CONTROL OUTPUTS        |
| EAFFH              | : EXTERNAL SYNC MODE H DRIVE INPUT                 | CEV0, 1     | : C NOISE REDUCER MODE SELECT OUTPUTS |
| EEVN               | : EXTERNAL SYNC MODE EVEN/ODD SELECT INPUT         | CINC        | : READ PORT CHROMA INCREMENT OUTPUT   |
| EPAL               | : EXTERNAL SYNC MODE PAL COLOR ID INPUT            | DRCK        | : DELAYED READ CLOCK OUTPUT           |
| EPVD               | : REFERENCE VD                                     | DWCK        | : DELAYED WRITE CLOCK OUTPUT          |
| ESYN               | : EXTERNAL SYNC MODE CHROMA SYNC INPUT             | FNR         | : NOISE REDUCER ON/OFF CONTROL OUTPUT |
| EVD                | : EXTERNAL SYNC MODE V DRIVE INPUT                 | HBD0, 1     | : U-AXIS BORDER LEVEL OUTPUTS         |
| EVMT               | : EXTERNAL VIDEO MUTE INPUT (H: MUTE, L: NORMAL)   | HBD2, 3     | : V-AXIS BORDER LEVEL OUTPUTS         |
| MSCK               | : MASTER CLOCK INPUT                               | HCL1, 2     | : WRITE PORT HORIZONTAL CLEAR OUTPUTS |
| OPI                | : INVERTER INPUT                                   | HPR0 - HPR2 | : H PROCESS OUTPUTS                   |
| RCKI               | : READ CLOCK INPUT                                 | INC0        | : WRITE PORT LINE INCREMENT OUTPUT    |
| REVN               | : READ EVEN/ODD FIELD MONITOR INPUT                | INC1        | : READ PORT LINE INCREMENT OUTPUT     |
| RSYS               | : READ SYNC SELECT INPUT (H: NTSC, L: PAL)         | JOG         | : REFERENCE CONTROL OUTPUT            |
| SDI                | : SERIAL DATA INPUT                                | MCCK        | : READ PORT CHROMA CLOCK OUTPUT       |
| SDK                | : SERIAL CLOCK INPUT                               | MYCK        | : READ PORT Y CLOCK OUTPUT            |
| TDS, TRH, TRV, TSH |  | OPO         | : INVERTER OUTPUT                     |
| TST, TSV, TWH, TWV |  | OPT0 - OPT3 | : OPTION OUTPUTS                      |
| VD                 | : TEST PIN   | PALP        | : PAL PHASE CONTROL OUTPUT            |
| WCKI               | : VERTICAL SYNC DETECT INPUT                       | PPT         | : SMALL PICTURE TIMING OUT            |
| WEVN               | : WRITE CLOCK INPUT                                | PSA0 - PSA3 | : WRITE PORT TRANSFER SYNC OUTPUTS    |
| WIND               | : WRITE EVEN/ODD FIELD MONITOR INPUT               | RCDT        | : READ FRAMING CODE TIMING OUTPUT     |
| WSYS               | : WINDOW COMPARATOR INPUT FOR V-PLL                | RCK0        | : READ CLOCK OUTPUT                   |
| WVMT               | : WRITE SYNC SELECT INPUT (H: NTSC, L: PAL)        | RUVO, 1     | : READ U/V TIMING OUTPUTS             |
| XCE                | : CHIP ENABLE INPUT                                | RVMT        | : READ MUTING OUTPUT                  |
| XCCLR              | : DIRECT CLEAR INPUT                               | SYT         | : MONITOR PIN FOR TEST                |
| XIN                | : CLOCK INPUT                                      | VCL0        | : WRITE PORT VERTICAL CLEAR OUTPUT    |
| XWE                | : WRITE ENABLE INPUT                               | VCL1, 2     | : READ PORT VERTICAL CLEAR OUTPUTS    |

| * 1 SOLARIZATION RESOLUTION   |                     | * 4 V-AXIS BORDER LEVEL |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
|---|---------------------|-------------------------|-----------|---------------------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|--|---|-----------|-------|-----|--------|-----|---------|-----|---------|-----|-------|--|
| <table> <tr><th>INPUTS</th><th>OUTPUTS</th></tr> <tr><td>BNS0/BNS1</td><td>RY0 RY1 RY2 RY3 RY4</td></tr> <tr><td>0 0</td><td>0 0 1 X X</td></tr> <tr><td>0 1</td><td>0 0 0 1 X</td></tr> <tr><td>1 0</td><td>0 0 0 0 1</td></tr> <tr><td>1 1</td><td>X X X X X</td></tr> </table> | INPUTS              | OUTPUTS                 | BNS0/BNS1 | RY0 RY1 RY2 RY3 RY4 | 0 0 | 0 0 1 X X | 0 1 | 0 0 0 1 X | 1 0 | 0 0 0 0 1 | 1 1 | X X X X X |  | <table> <tr><th>HBD3/HBD2</th><th>LEVEL</th></tr> <tr><td>0 0</td><td>20 IRE</td></tr> <tr><td>0 1</td><td>-20 IRE</td></tr> <tr><td>1 0</td><td>-30 IRE</td></tr> <tr><td>1 1</td><td>0 IRE</td></tr> </table> | HBD3/HBD2 | LEVEL | 0 0 | 20 IRE | 0 1 | -20 IRE | 1 0 | -30 IRE | 1 1 | 0 IRE |  |
| INPUTS  | OUTPUTS             |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| BNS0/BNS1   | RY0 RY1 RY2 RY3 RY4 |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 0 0   | 0 0 1 X X           |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 0 1   | 0 0 0 1 X           |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 1 0   | 0 0 0 0 1           |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 1 1   | X X X X X           |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| HBD3/HBD2   | LEVEL               |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 0 0   | 20 IRE              |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 0 1   | -20 IRE             |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 1 0   | -30 IRE             |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |
| 1 1   | 0 IRE               |                         |           |                     |     |           |     |           |     |           |     |           |  |   |           |       |     |        |     |         |     |         |     |       |  |

| * 2 CHROMA SIGNAL NOISE REDUCER SELECTION  |                        | INPUT/OUTPUT |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
|--|------------------------|--------------|------------------------------------|----------------------|-----|------------------------|-----|------------------------|-----|--------------|--|-----------|------------------------------------|
| <table> <tr><th>CEV0/CEV1</th><th>OPERATION</th></tr> <tr><td>0 0</td><td>NOISE REDUCER (SOFT)</td></tr> <tr><td>0 1</td><td>NOISE REDUCER (MIDDLE)</td></tr> <tr><td>1 0</td><td>NOISE REDUCER (STRONG)</td></tr> <tr><td>1 1</td><td>NO OPERATION</td></tr> </table> | CEV0/CEV1              | OPERATION    | 0 0                                | NOISE REDUCER (SOFT) | 0 1 | NOISE REDUCER (MIDDLE) | 1 0 | NOISE REDUCER (STRONG) | 1 1 | NO OPERATION |  | EA0 - EA7 | : ROM TEST TERMINAL INPUTS/OUTPUTS |
| CEV0/CEV1  | OPERATION              |              |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
| 0 0  | NOISE REDUCER (SOFT)   |              |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
| 0 1  | NOISE REDUCER (MIDDLE) |              |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
| 1 0  | NOISE REDUCER (STRONG) |              |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
| 1 1  | NO OPERATION           |              |                                    |                      |     |                        |     |                        |     |              |  |           |                                    |
|  |                        | ED0 - ED7    | : ROM TEST TERMINAL INPUTS/OUTPUTS |                      |     |                        |     |                        |     |              |  |           |                                    |

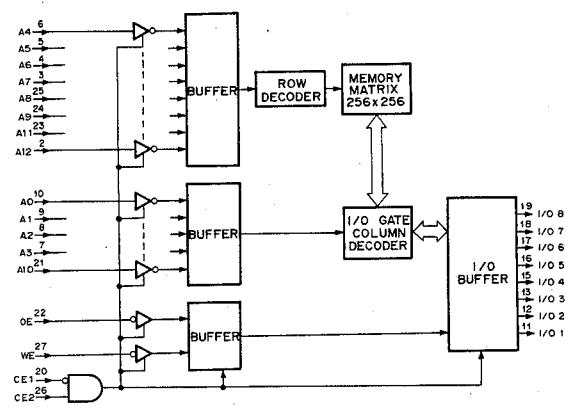
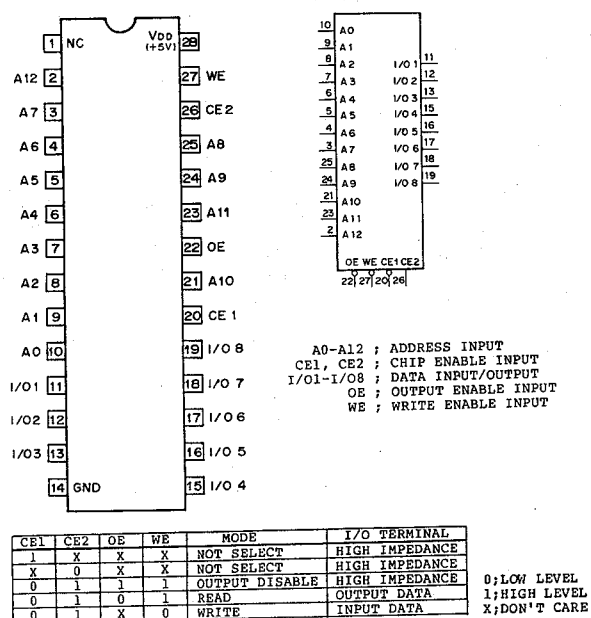
| * 3 U-AXIS BORDER LEVEL   |   | * 5 H PROCESS MODE SELECTION |     | * 6 Y SIGNAL NOISE REDUCER SELECTION |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
|---|---|------------------------------|-----|--------------------------------------|-----|---------|-----|---------|-----|-------|--|---|----------------|-----------|-------|------------------|-------|------------------|-------|--------------------|-------|--------------------|-------|---|-------|---|-------|---|-------|---------|--|--|----------------|-----------|-------|----------------------|-------|------------------------|-------|------------------------|-------|-------------|-------|-----------------|-------|-------------|-------|--------------------|-------|--------------|--|
| <table> <tr><th>HBD1/HBD0</th><th>LEVEL</th></tr> <tr><td>0 0</td><td>20 IRE</td></tr> <tr><td>0 1</td><td>-20 IRE</td></tr> <tr><td>1 0</td><td>-30 IRE</td></tr> <tr><td>1 1</td><td>0 IRE</td></tr> </table> | HBD1/HBD0                                     | LEVEL                        | 0 0 | 20 IRE                               | 0 1 | -20 IRE | 1 0 | -30 IRE | 1 1 | 0 IRE |  | <table> <tr><th>HPR2/HPR1/HPR0</th><th>OPERATION</th></tr> <tr><td>0 0 0</td><td>V-ENHANCE (SOFT)</td></tr> <tr><td>0 0 1</td><td>V-ENHANCE (SOFT)</td></tr> <tr><td>0 1 0</td><td>V-ENHANCE (MIDDLE)</td></tr> <tr><td>0 1 1</td><td>V-ENHANCE (STRONG)</td></tr> <tr><td>1 0 0</td><td>MIX RATIO H<sub>T</sub>:H<sub>p</sub>=1:1</td></tr> <tr><td>1 0 1</td><td>MIX RATIO H<sub>T</sub>:H<sub>p</sub>=1:3</td></tr> <tr><td>1 1 0</td><td>MIX RATIO H<sub>T</sub>:H<sub>p</sub>=3:1</td></tr> <tr><td>1 1 1</td><td>NO PLAY</td></tr> </table> | HPR2/HPR1/HPR0 | OPERATION | 0 0 0 | V-ENHANCE (SOFT) | 0 0 1 | V-ENHANCE (SOFT) | 0 1 0 | V-ENHANCE (MIDDLE) | 0 1 1 | V-ENHANCE (STRONG) | 1 0 0 | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =1:1 | 1 0 1 | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =1:3 | 1 1 0 | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =3:1 | 1 1 1 | NO PLAY |  | <table> <tr><th>YEV0/YEV1/YEV2</th><th>OPERATION</th></tr> <tr><td>0 0 0</td><td>NOISE REDUCER (SOFT)</td></tr> <tr><td>0 0 1</td><td>NOISE REDUCER (MIDDLE)</td></tr> <tr><td>0 1 0</td><td>NOISE REDUCER (STRONG)</td></tr> <tr><td>0 1 1</td><td>AFTER IMAGE</td></tr> <tr><td>1 0 0</td><td>VERTICAL FILTER</td></tr> <tr><td>1 0 1</td><td>FADE IN/OUT</td></tr> <tr><td>1 1 0</td><td>SELECT AFTER IMAGE</td></tr> <tr><td>1 1 1</td><td>NO OPERATION</td></tr> </table> | YEV0/YEV1/YEV2 | OPERATION | 0 0 0 | NOISE REDUCER (SOFT) | 0 0 1 | NOISE REDUCER (MIDDLE) | 0 1 0 | NOISE REDUCER (STRONG) | 0 1 1 | AFTER IMAGE | 1 0 0 | VERTICAL FILTER | 1 0 1 | FADE IN/OUT | 1 1 0 | SELECT AFTER IMAGE | 1 1 1 | NO OPERATION |  |
| HBD1/HBD0   | LEVEL   |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 0   | 20 IRE  |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 1   | -20 IRE                                       |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 0   | -30 IRE                                       |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 1   | 0 IRE   |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| HPR2/HPR1/HPR0  | OPERATION                                     |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 0 0   | V-ENHANCE (SOFT)                              |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 0 1   | V-ENHANCE (SOFT)                              |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 1 0   | V-ENHANCE (MIDDLE)                            |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 1 1   | V-ENHANCE (STRONG)                            |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 0 0   | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =1:1 |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 0 1   | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =1:3 |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 1 0   | MIX RATIO H <sub>T</sub> :H <sub>p</sub> =3:1 |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 1 1   | NO PLAY                                       |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| YEV0/YEV1/YEV2  | OPERATION                                     |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 0 0   | NOISE REDUCER (SOFT)                          |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 0 1   | NOISE REDUCER (MIDDLE)                        |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 1 0   | NOISE REDUCER (STRONG)                        |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 0 1 1   | AFTER IMAGE                                   |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 0 0   | VERTICAL FILTER                               |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 0 1   | FADE IN/OUT                                   |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 1 0   | SELECT AFTER IMAGE                            |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |
| 1 1 1   | NO OPERATION                                  |                              |     |                                      |     |         |     |         |     |       |  |   |                |           |       |                  |       |                  |       |                    |       |                    |       |   |       |   |       |   |       |         |  |  |                |           |       |                      |       |                        |       |                        |       |             |       |                 |       |             |       |                    |       |              |  |

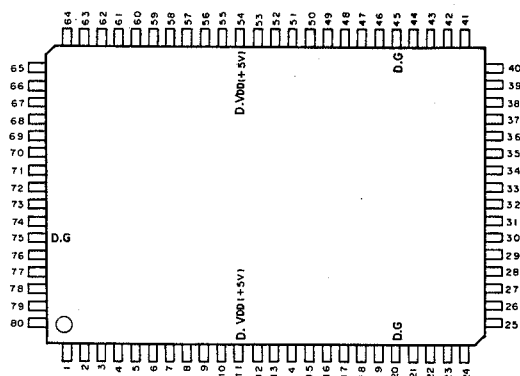
0: LOW LEVEL  
1: HIGH LEVEL

H<sub>T</sub> = THROUGH  
H<sub>p</sub> = 1H DELAY

CXK5864BM-12L (SONY) FLAT PACKAGE  
C-MOS 64K (8192x8)-BIT STATIC RAM  
- TOP VIEW -



CXD2105AQ (SONY) FLAT PACKAGE  
CMOS DIGITAL COMB FILTER FOR VTR'S  
- TOP VIEW -



| PIN No. | I/O | SIGNAL  | PIN No. | I/O | SIGNAL  | PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL |
|---------|-----|---------|---------|-----|---------|---------|-----|--------|---------|-----|--------|
| 1       | I   | BPV     | 21      | I   | IGD0    | 41      | I   | IGW2   | 61      | I   | IGY1   |
| 2       | O   | OPER    | 22      | I   | IGC1    | 42      | I   | IGW3   | 62      | I   | IGY2   |
| 3       | -   | A.Vdd P | 23      | I   | IGH1    | 43      | I   | IGW4   | 63      | I   | IGH1   |
| 4       | I   | IGPE    | 24      | I   | IGRP    | 44      | I   | IGW5   | 64      | O   | ORZH   |
| 5       | I   | IGPC    | 25      | I   | IGOC    | 45      | -   | D.G    | 65      | O   | OR00   |
| 6       | -   | A.G P   | 26      | -   | A.Vdd C | 46      | I/O | BMV1   | 66      | I   | IGRC   |
| 7       | I   | IGZV    | 27      | O   | OCIO    | 47      | I/O | BMV2   | 67      | I   | IYC8   |
| 8       | O   | OZVD    | 28      | O   | OCVG    | 48      | I/O | BMV3   | 68      | I   | IYC7   |
| 9       | O   | OZPS    | 29      | -   | ICVR    | 49      | I/O | BMV4   | 69      | I   | IYC6   |
| 10      | I   | IGZP    | 30      | O   | OCIR    | 50      | I/O | BMV5   | 70      | I   | IYC5   |
| 11      | -   | D.Vdd   | 31      | -   | A.G C   | 51      | I/O | BMV6   | 71      | I   | IYC4   |
| 12      | I/O | BMC1    | 32      | O   | OCVB    | 52      | I/O | BMV7   | 72      | I   | IYC3   |
| 13      | I/O | BMC2    | 33      | O   | OYVB    | 53      | I/O | BMV8   | 73      | I   | IYC2   |
| 14      | I/O | BMC3    | 34      | -   | A.G Y   | 54      | -   | D.Vdd  | 74      | I   | IYC1   |
| 15      | I/O | BMC4    | 35      | O   | OYIR    | 55      | I   | IGAC   | 75      | -   | D.G    |
| 16      | I/O | BMC5    | 36      | -   | IYVR    | 56      | I   | IGL3   | 76      | O   | OADC   |
| 17      | I/O | BMC6    | 37      | O   | OYVG    | 57      | I   | IGL2   | 77      | I   | IGNP   |
| 18      | I/O | BMC7    | 38      | O   | OYIO    | 58      | I   | IGL1   | 78      | I   | IGBE   |
| 19      | I/O | BMC8    | 39      | -   | A.Vdd Y | 59      | I/O | BAS0   | 79      | I   | IGPF   |
| 20      | -   | D.G     | 40      | I   | IGW1    | 60      | I   | IGC2   | 80      | I   | IGCK   |

**INPUT**

- BPV : EXT/INT CLOCK SELECT
- ICVR : ESTABLISHES MAXIMUM AMPLITUDE VALUE FOR OCIO (PIN 27)
- IGAC : V CORRELATION CIRCUIT ON/OFF
- IGBE : SINGLE WAVE DETECTION ON/OFF (Y/C SEPARATION MODE)
- IGC1 : V CORRELATION CIRCUIT SELECT
- IGC2 : CHROMA FLAT SECTION HORIZONTAL FILTER SELECT (Y/C SEPARATION MODE)
- IGCK : EXTERNAL CLOCK
- IGD0 : DROPOUT CORRECTION
- IGH1 : FLAT SECTION HORIZONTAL FILTER SELECT (Y/C SEPARATION MODE)
- IGH : SLEW MODE SET
- IGL1 - IGL3 : LIMITER LEVEL ADJUST FOR Y SIGNAL COMB FILTER
- IGNP : NTSC/PAL FORMAT SELECT
- IGOC : OUTPUT ENABLE
- IGPC : VCO CONTROL
- IGPE : TEST
- IGPF : PLL SUBCARRIER
- IGRC : DELAY LINE LENGTH ADJUST
- IGRP : Y/C SEPARATION AND PLAYBACK MODE SELECT
- IGW1 - IGW5 : Y COMB FILTER DEPTH ADJUST
- IGY1, IGY2 : EDGE SECTION HORIZONTAL FILTER SELECT (Y/C SEPARATION MODE)
- IGZP : 1-BIT DELAY CIRCUIT
- IGZV : VCR HEAD SWITCHING
- IYC1 - IYC8 : VIDEO SIGNAL
- IYVR : ESTABLISHES MAXIMUM AMPLITUDE VALUE FOR OYIO (PIN 38)

**OUTPUT**

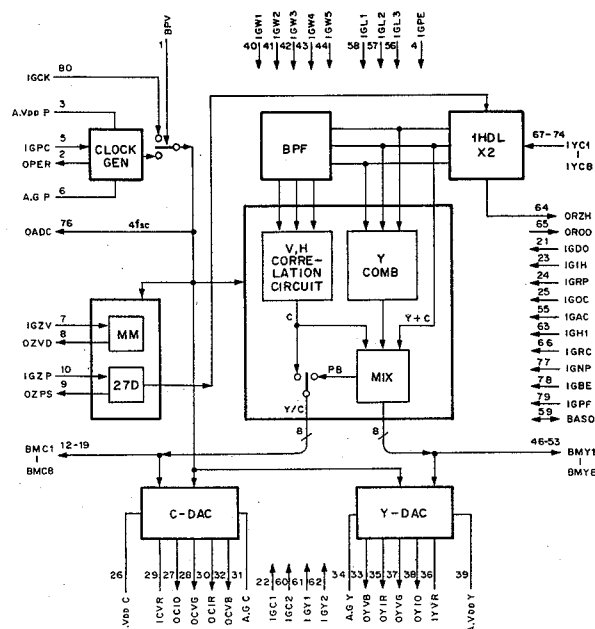
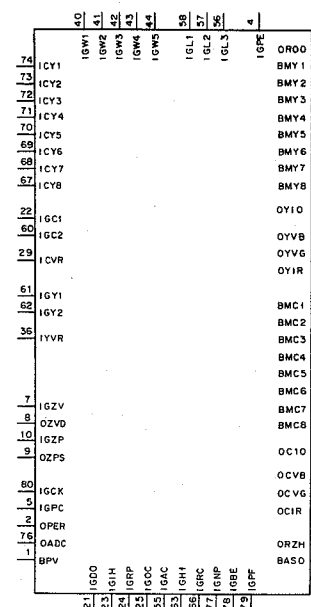
- OADC : CLOCK
- OCIO : CHROMA ANALOG SIGNAL
- OCIR : CONNECT A RESISTOR 16x LARGER THAN THE RESISTOR AT OCIO (PIN 27)
- OCVB : CONNECT TO DIGITAL GND WHICH HAS A CAPACITANCE OF UP TO 0.1  $\mu$ F
- OCVG : CONNECT TO AN ANALOG POWER SUPPLY WHICH HAS A CAPACITANCE OF UP TO 0.1  $\mu$ F
- OPER : PLL ERROR
- OR00 : "0" IS DETECTED AT ALL INPUTS
- ORZH : 1-BIT DELAY CIRCUIT
- OYIO : Y ANALOG SIGNAL
- OYIR : CONNECT A RESISTOR 16x LARGER THAN THE RESISTOR AT OYIO (PIN 38)
- OYVB : CONNECT TO DIGITAL GND WHICH HAS A CAPACITANCE OF UP TO 0.1  $\mu$ F
- OYVG : CONNECT TO AN ANALOG POWER SUPPLY WHICH HAS A CAPACITANCE OF UP TO 0.1  $\mu$ F
- OZPS : 1-BIT DELAY CIRCUIT
- OZVD : VSYNC PERIOD MASK

**INPUT/OUTPUT**

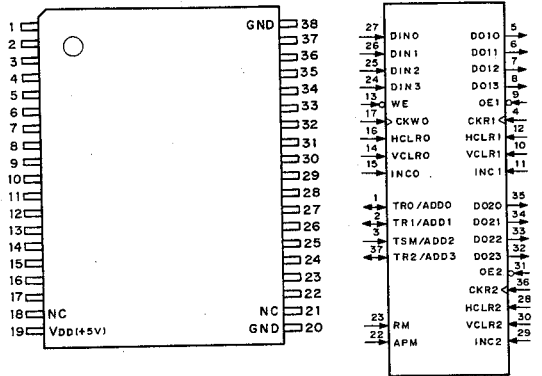
- BAS0 : EDGE DETECTION LEVEL SELECT (Y/C SEPARATION MODE)
- BMC1 - BMC8 : CHROMA DIGITAL SIGNAL
- BMV1 - BMV8 : Y DIGITAL SIGNAL

**OTHER**

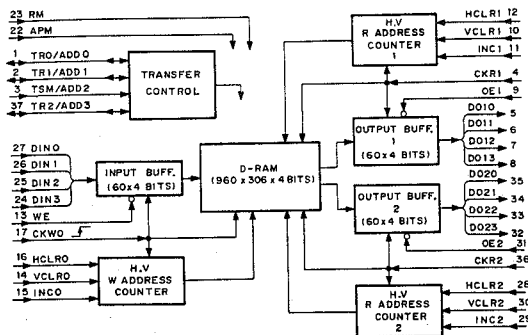
- A.G C : ANALOG GND FOR CHROMA D/A
- A.G P : ANALOG GND FOR VCO
- A.G Y : ANALOG GND FOR Y D/A
- A.Vdd C : ANALOG POWER SUPPLY FOR CHROMA D/A
- A.Vdd P : ANALOG POWER SUPPLY FOR VCO
- A.Vdd Y : ANALOG POWER SUPPLY FOR Y D/A
- D.G : DIGITAL GND
- D.Vdd : POWER SUPPLY FOR DIGITAL



CKX1206AM (SONY) FLAT PACKAGE  
C-MOS VIDEO FIELD MEMORY (960-COLUMNx306-ROWx4-BIT)  
- TOP VIEW -



| PIN | SIGNAL   | DESCRIPTION                                 |
|-----|----------|---|
| 1   | TR0/ADD0 | W PORT 0 TRANSFER SYNC I/O, ADDRESS 0 INPUT |
| 2   | TR1/ADD1 | R PORT 1 TRANSFER SYNC I/O, ADDRESS 1 INPUT |
| 3   | TSM/ADD2 | TRANSFER SYNCHRONOUS MODE, ADDRESS 2 INPUT  |
| 4   | CKR1     | R PORT 1 SHIFT SIGNAL INPUT                 |
| 5   | DO10     | R PORT 1 DATA 0 OUTPUT                      |
| 6   | DO11     | R PORT 1 DATA 1 OUTPUT                      |
| 7   | DO12     | R PORT 1 DATA 2 OUTPUT                      |
| 8   | DO13     | R PORT 1 DATA 3 OUTPUT                      |
| 9   | OE1      | R PORT 1 OUTPUT ENABLE INPUT                |
| 10  | VCLR1    | R PORT 1 VERTICAL CLEAR INPUT               |
| 11  | INC1     | R PORT 1 LINE INCREMENT INPUT               |
| 12  | HCLR1    | R PORT 1 HORIZONTAL CLEAR INPUT             |
| 13  | WE       | W PORT 0 WRITE ENABLE INPUT                 |
| 14  | VCLRO    | W PORT 0 VERTICAL CLEAR INPUT               |
| 15  | INCO     | W PORT 0 LINE INCREMENT INPUT               |
| 16  | HCLRO    | W PORT 0 HORIZONTAL CLEAR INPUT             |
| 17  | CKWO     | W PORT 0 SHIFT SIGNAL INPUT                 |
| 18  | NC       | (no connection)                             |
| 19  | VDD      | +5V INPUT                                   |
| 20  | GND      | GND   |
| 21  | NC       | (no connection)                             |
| 22  | APM      | ADDRESS PRESET MODE INPUT                   |
| 23  | RM       | RECURSIVE MODE ENABLE INPUT                 |
| 24  | DIN3     | W PORT 0 DATA 3 INPUT                       |
| 25  | DIN2     | W PORT 0 DATA 2 INPUT                       |
| 26  | DIN1     | W PORT 0 DATA 1 INPUT                       |
| 27  | DINO     | W PORT 0 DATA 0 INPUT                       |
| 28  | HCLR2    | R PORT 2 HORIZONTAL CLEAR INPUT             |
| 29  | INC2     | R PORT 2 LINE INCREMENT INPUT               |
| 30  | VCLR2    | R PORT 2 VERTICAL CLEAR INPUT               |
| 31  | OE2      | R PORT 2 OUTPUT ENABLE INPUT                |
| 32  | DO23     | R PORT 2 DATA 3 OUTPUT                      |
| 33  | DO22     | R PORT 2 DATA 2 OUTPUT                      |
| 34  | DO21     | R PORT 2 DATA 1 OUTPUT                      |
| 35  | DO20     | R PORT 2 DATA 0 OUTPUT                      |
| 36  | CKR2     | R PORT 2 SHIFT SIGNAL INPUT                 |
| 37  | TR2/ADD3 | R PORT 2 TRANSFER SYNC I/O, ADDRESS 3 INPUT |
| 38  | GND      | GND   |

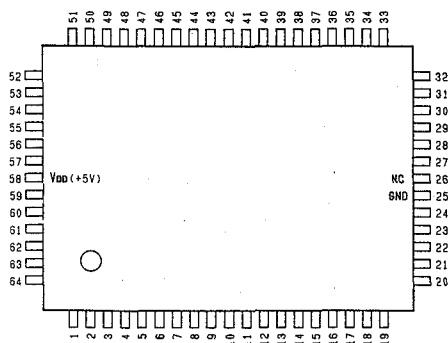


## MODE SELECTION

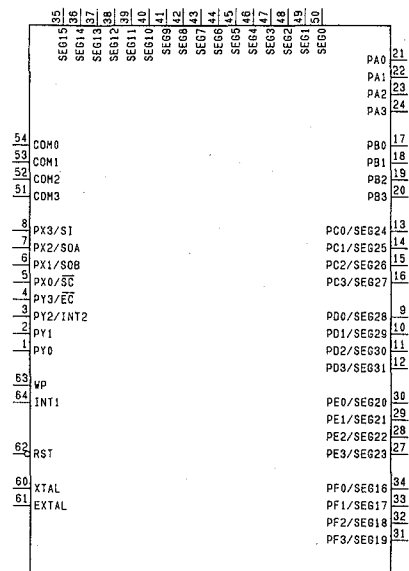
| CONTROL INPUTS |     | TS, TR/ADD |         | MODE   |
|----------------|-----|------------|---------|--|
| RM             | APM | TS         | TR/ADD  |  |
| 0              | 0   | 0          | OUT-PUT | NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT |
| 0              | 0   | 1          | IN-PUT  | NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT  |
| 0              | 1   | -          | -       | NON RECURSIVE MODE, ADDRESS PRESET MODE              |
| 1              | 0   | 0          | OUT-PUT | RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT     |
| 1              | 0   | 1          | IN-PUT  | RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT      |

0:LOW LEVEL 1:HIGH LEVEL

CXP5084H-645Q (SONY)  
CMOS 4-BIT MICROCOMPUTER  
- TOP VIEW -



| No | I/O | SIGNAL    | No | I/O | SIGNAL    | No | I/O | SIGNAL    | No | I/O | SIGNAL    |
|----|-----|-----------|----|-----|-----------|----|-----|-----------|----|-----|-----------|
| 1  | 0   | PY0       | 17 | I/O | PB0       | 33 | 0   | PF1/SEG17 | 49 | 0   | SEG1      |
| 2  | 0   | PY1       | 18 | I/O | PB1       | 34 | 0   | PF0/SEG16 | 50 | 0   | SEG0      |
| 3  | I   | PY2/INT2  | 19 | I/O | PB2       | 35 | 0   | SEG15     | 51 | 0   | COM3      |
| 4  | I   | PY3/EC    | 20 | I/O | PB3       | 36 | 0   | SEG14     | 52 | 0   | COM2      |
| 5  | I/O | PX0/SC    | 21 | I/O | PA0       | 37 | 0   | SEG13     | 53 | 0   | COM1      |
| 6  | I/O | PX1/S0B   | 22 | I/O | PA1       | 38 | 0   | SEG12     | 54 | 0   | COM0      |
| 7  | I/O | PX2/S0A   | 23 | I/O | PA2       | 39 | 0   | SEG11     | 55 | -   | VLC1      |
| 8  | I   | PX3/S1    | 24 | I/O | PA3       | 40 | 0   | SEG10     | 56 | -   | VLC2      |
| 9  | I/O | PD0/SEG28 | 25 | -   | GND       | 41 | 0   | SEG9      | 57 | -   | VLC3      |
| 10 | I/O | PD1/SEG29 | 26 | -   | NC        | 42 | 0   | SEG8      | 58 | -   | VDD (+5V) |
| 11 | I/O | PD2/SEG30 | 27 | 0   | PE3/SEG23 | 43 | 0   | SEG7      | 59 | 0   | VL        |
| 12 | I/O | PD3/SEG31 | 28 | 0   | PE2/SEG22 | 44 | 0   | SEG6      | 60 | 0   | XTAL      |
| 13 | I/O | PC0/SEG24 | 29 | 0   | PE1/SEG21 | 45 | 0   | SEG5      | 61 | I   | EXTAL     |
| 14 | I/O | PC1/SEG25 | 30 | 0   | PE0/SEG20 | 46 | 0   | SEG4      | 62 | I/O | RST       |
| 15 | I/O | PC2/SEG26 | 31 | 0   | PF3/SEG19 | 47 | 0   | SEG3      | 63 | I   | WP        |
| 16 | I/O | PC3/SEG27 | 32 | 0   | PF2/SEG18 | 48 | 0   | SEG2      | 64 | I   | INT1      |

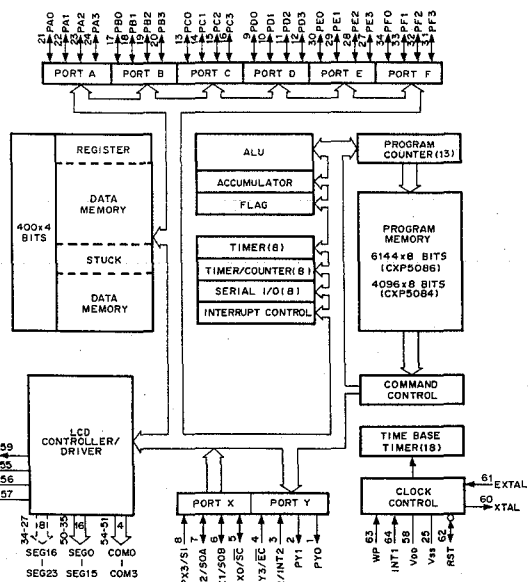


**INPUT**  
EXTAL :CLOCK GENERATOR INPUT  
INT1 :INTERRUPT INPUT 1  
INT2/PY2 :PORT Y BIT "2" AND INTERRUPT  
PY3/EC :EVENT COUNTER (8-BIT) INPUT AND PORT Y BIT "3" INPUT  
S1/PX3 :SERIAL DATA AND PORT X BIT "3" INPUT  
WP :WAKE-UP INPUT TO CANCEL STANDBY MODE

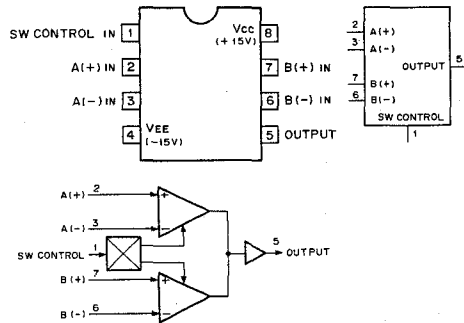
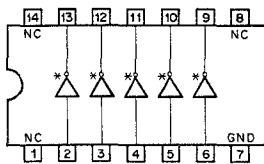
**OUTPUT**  
COM3-COM0 :COMMON SIGNAL OUTPUT FOR LCD  
PE3/SEG23-PE0/SEG20 :PORT E (4-BIT) AND SEGMENT SIGNAL OUTPUT FOR LCD.  
PF3/SEG19-PF0/SEG16 :PORT F (4-BIT) AND SEGMENT SIGNAL OUTPUT FOR LCD.  
PY0 :PORT Y BIT "0" OUTPUT  
AND 32KHz T/C PRESCALER OUTPUT.  
PY1 :PORT Y BIT "1" OUTPUT  
AND PWM GENERATOR (14-BIT) OUTPUT.  
SEG0-SEG15 :SEGMENT SIGNAL OUTPUT FOR LCD.  
VL :CONTROL SIGNAL OUT FOR LCD CUTOFF AT STANDBY.  
XTAL :CLOCK GENERATOR OUTPUT

**INPUT/OUTPUT**  
PA0-PA3 :PORT A (4-BIT)  
PB0-PB3 :PORT B (4-BIT)  
PC0/SEG24-PC3/SEG27 :PORT C (4-BIT) AND SEGMENT SIGNAL OUTPUT FOR LCD.  
PD0/SEG28-PD3/SEG31 :PORT D (4-BIT) AND SEGMENT SIGNAL OUTPUT FOR LCD.  
RST :OUTPUT OF INTERNAL POWER ON RESET CIRCUIT  
PX0/SC :PORT X BIT "0" AND SERIAL I/O SHIFT CLOCK I/O INPUT  
PX1/S0B :PORT X BIT "1"  
AND SERIAL DATA OUTPUT OF SERIAL I/O INPUT  
PX2/S0A :PORT X BIT "2" AND SERIAL INTERFACE (8-BIT) INPUT

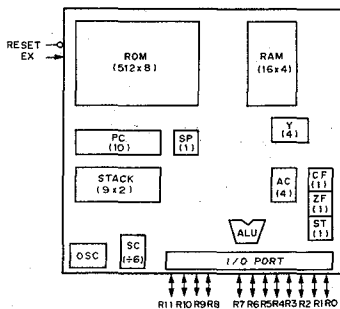
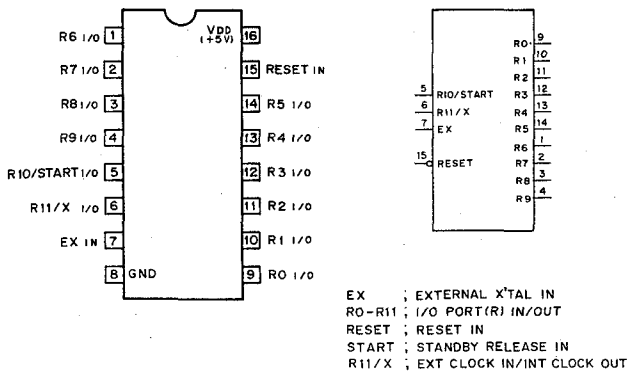
**OTHERS**  
VLC1-VLC3 :POWER SUPPLY FOR LCD



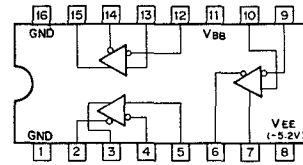
## M5201FP (MITSUBISHI) FLAT PACKAGE

DUAL OPERATIONAL AMPLIFIERS WITH SWITCHED OUTPUT  
- TOP VIEW -M54516F (MITSUBISHI) FLAT PACKAGE  
M54516P (MITSUBISHI)INVERTER WITH OPEN-COLLECTOR  
(DARLINGTON-CONNECTED TRANSISTOR ARRAY)  
- TOP VIEW -

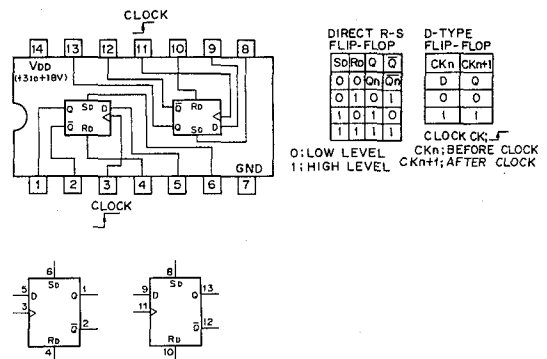
## MB88201HPF-539N (FUJITSU)

CMOS 4-BIT MICROCOMPUTER  
- TOP VIEW -

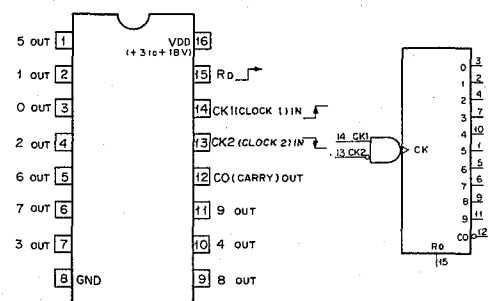
## MC10H116M (MOTOROLA) FLAT PACKAGE











ECL TRIPLE DIFFERENTIAL OR/NOR LINE RECEIVERS  
- TOP VIEW -

## MC14013BF (MOTOROLA) FLAT PACKAGE

CMOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET  
- TOP VIEW -

## MC14017BF (MOTOROLA) FLAT PACKAGE

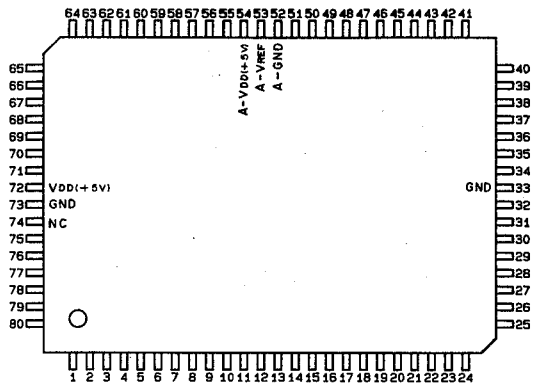
CMOS DECADE COUNTER/DIVIDER  
- TOP VIEW -

| COUNT    | INPUTS |   | OUTPUTS   |   |   |   |   |   |   |   |   |   |    |  |  |
|----------|--------|---|-----------|---|---|---|---|---|---|---|---|---|----|--|--|
|          | RD     | CK-CK0  | 9         | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | CO |  |  |
| 0        | 1      | X   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  |  |  |
| 0        | 0      |  | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  |  |  |
| 1        | 0      |  | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0  |  |  |
| 2        | 0      |  | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0  |  |  |
| 3        | 0      |  | 0         | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0  |  |  |
| 4        | 0      |  | 0         | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| 5        | 0      |  | 0         | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| 6        | 0      |  | 0         | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| 7        | 0      |  | 0         | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| 8        | 0      |  | 0         | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| 9        | 0      |  | 1         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |  |  |
| NO COUNT | 0      | 1   | NO CHANGE |   |   |   |   |   |   |   |   |   |    |  |  |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE



CXP80116-870Q (SONY)  
CXP80116-871Q (SONY)  
CMOS 8-BIT MICROCOMPUTER  
- TOP VIEW -

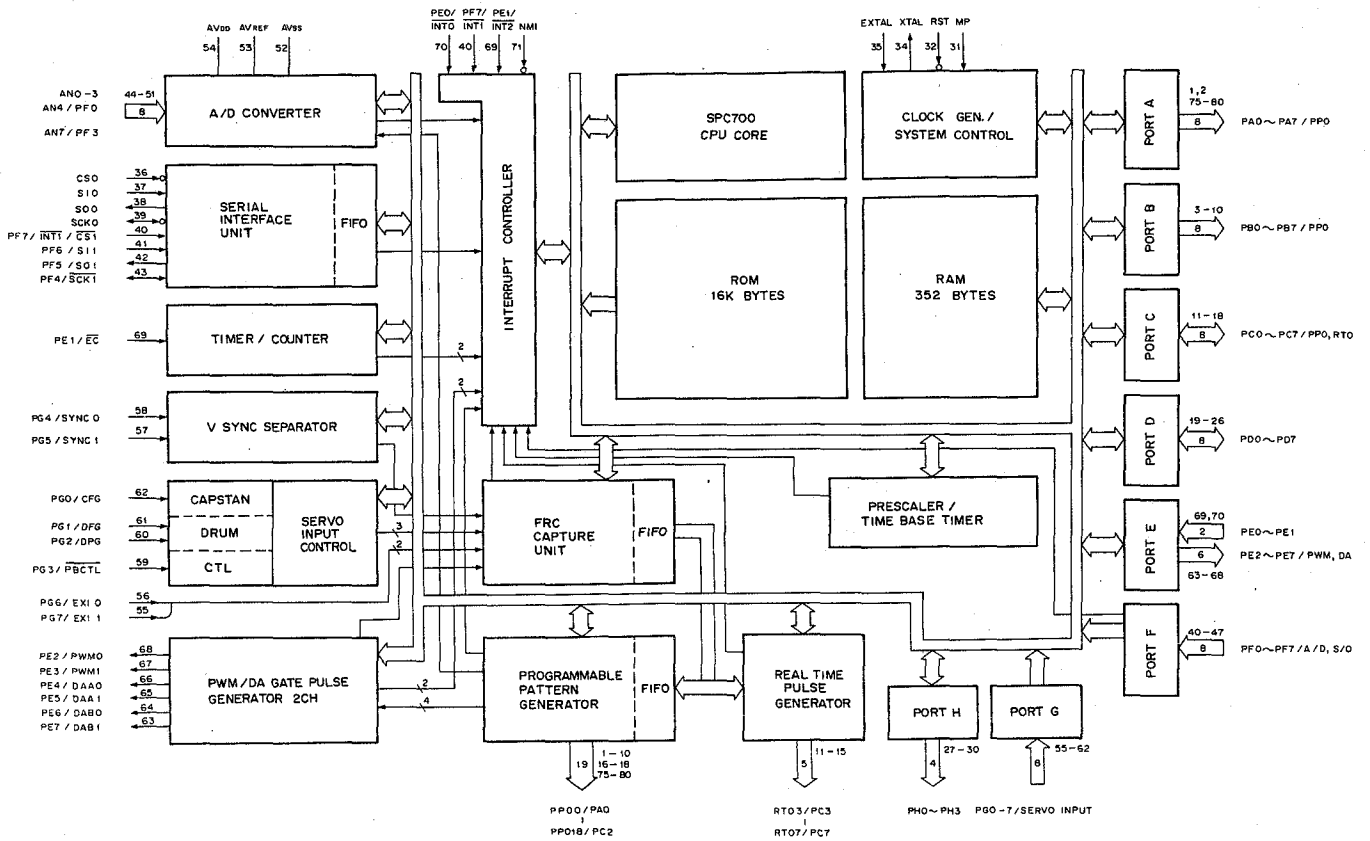


(V<sub>DD</sub> = +5V)

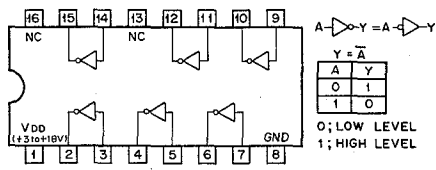
| PIN NO. | I/O      | SYMBOL       | PIN NO. | I/O | SYMBOL       |
|---------|----------|--------------|---------|-----|--------------|
| 1       | O        | PA1/PP01/A9  | 41      | I   | PF6/SI1      |
| 2       | O        | PA0/PP00/A8  | 42      | I/O | PF5/SO1      |
| 3       | O        | PB7/PP015/A7 | 43      | I/O | PF4/SCK1     |
| 4       | O        | PB6/PP014/A6 | 44      | I   | PF3/AN7      |
| 5       | O        | PB5/PP013/A5 | 45      | I   | PF2/AN6      |
| 6       | O        | PB4/PP012/A4 | 46      | I   | PF1/AN5      |
| 7       | O        | PB3/PP011/A3 | 47      | I   | PF0/AN4      |
| 8       | O        | PB2/PP010/A2 | 48      | I   | AN3          |
| 9       | O        | PB1/PP09/A1  | 49      | I   | AN2          |
| 10      | O        | PB0/PP08/A0  | 50      | I   | AN1          |
| 11      | I/O, I/O | PC7/RT07/D7  | 51      | I   | AN0          |
| 12      | I/O, I/O | PC6/RT06/D6  | 52      | -   | A-GND        |
| 13      | I/O, I/O | PC5/RT05/D5  | 53      | -   | A-VREF       |
| 14      | I/O, I/O | PC4/RT04/D4  | 54      | -   | A-VDD        |
| 15      | I/O, I/O | PC3/RT03/D3  | 55      | I   | PG7/EX11     |
| 16      | I/O, I/O | PC2/PP018/D2 | 56      | I   | PG6/EX10     |
| 17      | I/O, I/O | PC1/PP017/D1 | 57      | I   | PG5/SYNC1    |
| 18      | I/O, I/O | PC0/PP016/D0 | 58      | I   | PG4/SYNC0    |
| 19      | I/O, O   | PD7/HALT     | 59      | I   | PG3/PBCTL    |
| 20      | I/O, O   | PD6/BRQ      | 60      | I   | PG2/DPG      |
| 21      | I/O, O   | PD5/BAK      | 61      | I   | PG1/DFG      |
| 22      | I/O, O   | PD4/SYNC     | 62      | I   | PG0/CFG      |
| 23      | I/O, O   | PD3/C        | 63      | O   | PE7/DAB1     |
| 24      | I/O, O   | PD2/R/W      | 64      | O   | PE6/DAB0     |
| 25      | I/O, O   | PD1/WR       | 65      | O   | PE5/DAA1     |
| 26      | I/O, O   | PD0/RD       | 66      | O   | PE4/DAA0     |
| 27      | O        | PH3          | 67      | O   | PE3/PWM1     |
| 28      | O        | PH2          | 68      | O   | PE2/PWM0     |
| 29      | O        | PH1          | 69      | I   | PE1/EC/INT2  |
| 30      | O        | PH0          | 70      | I   | PE0/INT0     |
| 31      | I        | MP           | 71      | I   | NMI          |
| 32      | I/O      | RST          | 72      | -   | VDD          |
| 33      | -        | GND          | 73      | -   | GND          |
| 34      | O        | XTAL         | 74      | -   | NC           |
| 35      | I        | EXTAL        | 75      | O   | PA7/PP07/A15 |
| 36      | I        | CS0          | 76      | O   | PA6/PP06/A14 |
| 37      | I        | SI0          | 77      | O   | PA5/PP05/A13 |
| 38      | O        | SO0          | 78      | O   | PA4/PP04/A12 |
| 39      | I/O      | SCK0         | 79      | O   | PA3/PP03/A11 |
| 40      | I        | PF7/INT1/CS1 | 80      | O   | PA2/PP02/A10 |

|    |                  |                  |             |              |  |
|----|------------------|------------------|-------------|--------------|--|
| 18 | PC0 / PP016 / D0 | PB0 / PP08 / A0  | 10          | INPUT        |  |
| 17 | PC1 / PP017 / D1 | PB1 / PP09 / A1  | 9           | AN0 - AN7    | : ANALOG INPUTS                          |
| 16 | PC2 / PP018 / D2 | PB2 / PP10 / A2  | 8           | BRQ          | : BUS REQUEST INPUT                      |
| 15 | PC3 / RT03 / D3  | PB3 / PP11 / A3  | 7           | CFG          | : CAPSTAN FG INPUT                       |
| 14 | PC4 / RT04 / D4  | PB4 / PP12 / A4  | 6           | CS0,1        | : CHIP SELECT INPUTS                     |
| 13 | PC5 / RT05 / D5  | PB5 / PP13 / A5  | 5           | DFG          | : DRUM FG INPUT                          |
| 12 | PC6 / RT06 / D6  | PB6 / PP14 / A6  | 4           | DPG          | : DRUM PG INPUT                          |
| 11 | PC7 / RT07 / D7  | PB7 / PP15 / A7  | 3           | EC           | : EVENT INPUT                            |
| 51 | AN0              | PA0 / PP00 / A8  | 2           | EXI0,1       | : EXTERNAL INPUTS                        |
| 50 | AN1              | PA1 / PP01 / A9  | 1           | EXTAL        | : SYSTEM CLOCK GENERATE JOINT            |
| 49 | AN2              | PA2 / PP02 / A10 | 0           | HALT         | : CPU STOP INPUT                         |
| 48 | AN3              | PA3 / PP03 / A11 | INT0 - INT2 | MP           | : EXTERNAL OFFERING INPUTS               |
| 47 | PF0 / AN4        | PA4 / PP04 / A12 | 79          | NMI          | : MICRO PROSESSOR MODE INPUT             |
| 46 | PF1 / AN5        | PA5 / PP05 / A13 | 78          | PBCTL        | : NONMASKABLE OFFERING INPUT             |
| 45 | PF2 / AN6        | PA6 / PP06 / A14 | 77          | PE0,1        | : PB CTL PULSE INPUT                     |
| 44 | PF3 / AN7        | PA7 / PP07 / A15 | 76          | PF0 - PF7    | : PORT E INPUTS                          |
| 52 | PG0 / CFG        | PE2 / PWM0       | 75          | PG0 - PG7    | : PORT F INPUTS                          |
| 51 | PG1 / DFG        | PE3 / PWM1       | 74          | SI0,1        | : PORT G INPUTS                          |
| 50 | PG2 / DFG        | PE4 / DAA0       | 73          | SYNC0,1      | : SERIAL DATA INPUTS                     |
| 49 | PG3 / PBCTL      | PE5 / DAA1       | 72          |              | : COMPOSITE SYNC INPUTS                  |
| 48 | PG4 / SYNC0      | PE6 / BAB0       | 63          | OUTPUT       |  |
| 47 | PG5 / SYNC1      | PE7 / BAB1       | 62          | A0 - A15     | : ADDRESS BUS OUTPUTS                    |
| 46 | PG6 / EX10       | PH0              | 61          | BAK          | : BUS ACKNOWLEDGE OUTPUT                 |
| 45 | PG7 / EX11       | PH1              | 60          | C            | : TIMING SIGNAL OUTPUT                   |
| 26 | PD0 / RD         | PH2              | 59          | DAA0,1       | : DA GATE PULSE OUTPUTS                  |
| 25 | PD1 / WR         | PH3              | 58          | DAB0,1       | : DA GATE PULSE OUTPUTS                  |
| 24 | PD2 / R / W      | MP               | 57          | PA0 - PA7    | : PORT A OUTPUTS                         |
| 23 | PD3 / C          | RST              | 56          | PB0 - PB7    | : PORT B OUTPUTS                         |
| 22 | PD4 / SYNC       | SO0              | 55          | PE2 - PE7    | : PORT C OUTPUTS                         |
| 21 | PD5 / BAK        | SCK0             | 54          | PH0 - PH5    | : PORT D OUTPUTS                         |
| 20 | PD6 / BRQ        | PF5 / SO1        | 53          | PP00 - PP018 | : PROGRAMMABLE PATTERN GENERATOR OUTPUTS |
| 19 | PD7 / HALT       | PF4 / SCK1       | 52          |              |  |
| 35 | EXTAL            | XTAL             | 34          | PWM0,1       | : PWM OUTPUTS                            |
| 36 | CS0              |                  | 27          | R/W          | : CPU MACHINE SYCLE                      |
| 37 | SI0              |                  | 31          | RD           | : READ                                   |
| 40 | PF7 / INT1 / CS1 |                  | 32          | RT03 - RT07  | : REAL TIME PULSE OUTPUTS                |
| 41 | PF6 / SI1        |                  | 33          | SO0,1        | : SERIAL DATA OUTPUTS                    |
| 42 | PE1 / EC / INT2  |                  | 34          | SYNC         | : SYNC                                   |
| 43 | PE0 / INT0       |                  | 35          | WR           | : WRITE                                  |
| 71 | NMI              |                  | 36          | XTAL         | : SYSTEM CLOCK GENERATER OUTPUT          |

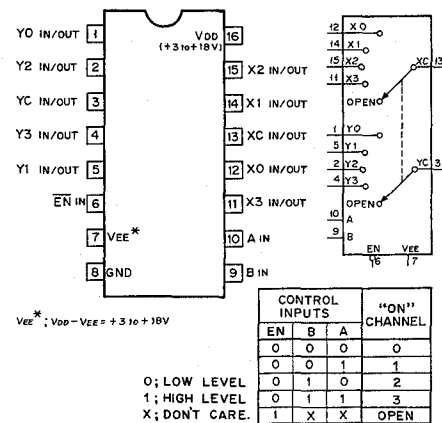
INPUT/OUTPUT  
D0 - D7 : DATA BUS  
PC0 - PC7 : PORT C  
PD0 - PD7 : PORT D  
RST : RESET  
SCK0,1 : SERIAL CLOCK



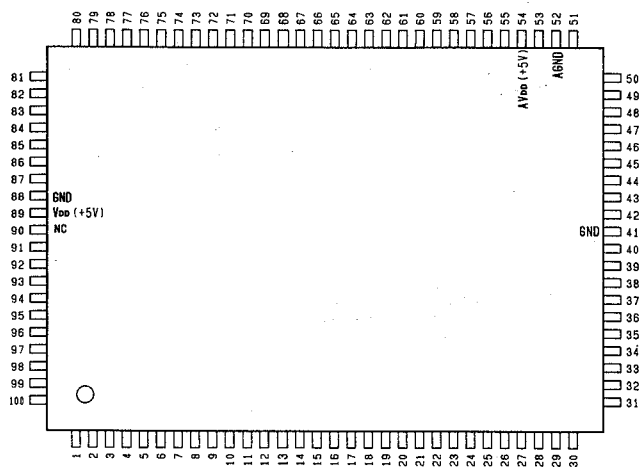
MC14049UBF (MOTOROLA) FLAT PACKAGE  
C-MOS INVERTING TYPE BUFFER/CONVERTER  
- TOP VIEW -



MC14052BF (MOTOROLA) FLAT PACKAGE  
HD14053BFP (HITACHI)  
C-MOS DUAL 4-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS  
- TOP VIEW -



CXP80624-445Q (SONY) FLAT PACKAGE  
C-MOS 8-BIT 1-CHIP MICROCOMPUTER  
- TOP VIEW -



(V<sub>DD</sub> = AV<sub>DD</sub> = +5V)

| PIN No. | I/O | SIGNAL    | PIN No. | I/O | SIGNAL   | PIN No. | I/O | SIGNAL           | PIN No. | I/O | SIGNAL          |
|---------|-----|-----------|---------|-----|----------|---------|-----|------------------|---------|-----|-----------------|
| 1       | O   | PB5/PP013 | 26      | I/O | PD4      | 51      | I/O | PF4/AN8          | 76      | O   | PE2/PWM0        |
| 2       | O   | PB4/PP012 | 27      | I/O | PD3      | 52      | -   | AGND             | 77      | I   | PE1/EC/INT2     |
| 3       | O   | PB3/PP011 | 28      | I/O | PD2      | 53      | I   | AVREF            | 78      | I   | PE0/INT0        |
| 4       | O   | PB2/PP010 | 29      | I/O | PD1      | 54      | -   | AV <sub>DD</sub> | 79      | I/O | PI7/SI1         |
| 5       | O   | PB1/PP009 | 30      | I/O | PD0      | 55      | I   | PF3/AN7          | 80      | I/O | PI6/SO1         |
| 6       | O   | PB0/PP008 | 31      | I/O | PH7      | 56      | I   | PF2/AN6          | 81      | I/O | PI5/SCK1        |
| 7       | I/O | PC7/RT07  | 32      | O   | PH6      | 57      | I   | PF1/AN5          | 82      | I/O | PI4/INT1        |
| 8       | I/O | PC6/RT06  | 33      | O   | PH5      | 58      | I   | PF0/AN4          | 83      | I/O | PI3/TO          |
| 9       | I/O | PC5/RT05  | 34      | O   | PH4      | 59      | I   | AN3              | 84      | I/O | PI2/PWM         |
| 10      | I/O | PC4/RT04  | 35      | O   | PH3      | 60      | I   | AN2              | 85      | I/O | PI1/PO          |
| 11      | I/O | PC3/RT03  | 36      | O   | PH2      | 61      | I   | AN1              | 86      | I   | PI0/PCK         |
| 12      | I/O | PC2/PP018 | 37      | O   | PH1      | 62      | I   | AN0              | 87      | I   | PK0             |
| 13      | I/O | PC1/PP017 | 38      | O   | PH0      | 63      | I   | PG7/EXI1         | 88      | -   | GND             |
| 14      | I/O | PC0/PP016 | 39      | O   | MP       | 64      | I   | PG6/EXI0         | 89      | -   | V <sub>DD</sub> |
| 15      | I/O | PJ7       | 40      | I/O | RST      | 65      | I   | PG5/SYNC1        | 90      | -   | NC              |
| 16      | I/O | PJ6       | 41      | -   | GND      | 66      | I   | PG4/SYNC0        | 91      | O   | PA7/PP07        |
| 17      | I/O | PJ5       | 42      | O   | XTAL     | 67      | I   | PG3/PBCTL        | 92      | O   | PA6/PP06        |
| 18      | I/O | PJ4       | 43      | I   | EXTAL    | 68      | I   | PG2/DPG          | 93      | O   | PA5/PP05        |
| 19      | I/O | PJ3       | 44      | I   | CS0      | 69      | I   | PG1/DFG          | 94      | O   | PA4/PP04        |
| 20      | I/O | PJ2       | 45      | I   | SI0      | 70      | I   | PG0/CFG          | 95      | O   | PA3/PP03        |
| 21      | I/O | PJ1       | 46      | O   | SO0      | 71      | O   | PE7/DAB1         | 96      | O   | PA2/PP02        |
| 22      | I/O | PJ0       | 47      | I/O | SCK0     | 72      | O   | PE6/DAB0         | 97      | O   | PA1/PP01        |
| 23      | I/O | PD7       | 48      | I/O | PFT/AN11 | 73      | O   | PE5/DAA1         | 98      | O   | PA0/PP00        |
| 24      | I/O | PD6       | 49      | I/O | PF6/AN10 | 74      | O   | PE4/DAA0         | 99      | O   | PB7/PP015       |
| 25      | I/O | PD5       | 50      | I/O | PF5/AN9  | 75      | O   | PE3/PWM1         | 100     | O   | PB6/PP014       |

|     |                  |             |    |
|-----|------------------|-------------|----|
| 91  | PA7/PP07         | DAB1/PE7    | 71 |
| 92  | PA6/PP06         | DAB0/PE6    | 72 |
| 93  | PA5/PP05         | DAA1/PE5    | 73 |
| 94  | PA4/PP04         | DAA0/PE4    | 74 |
| 95  | PA3/PP03         | PWM1/PE3    | 75 |
| 96  | PA2/PP02         | PWM0/PE2    | 76 |
| 97  | PA1/PP01         | EC/INT2/PE1 | 77 |
| 98  | PA0/PP00         | INT0/PE0    | 78 |
| 99  | PB7/PP015        | EXI1/PG7    | 83 |
| 100 | PB6/PP014        | EXI0/PG6    | 84 |
| 1   | PB5/PP013        | SYNC0/PG5   | 85 |
| 2   | PB4/PP012        | SYNC0/PG4   | 86 |
| 3   | PB3/PP011        | PBCTL/PG3   | 87 |
| 4   | PB2/PP010        | DPG/PG2     | 88 |
| 5   | PB1/PP009        | DPG/PG1     | 89 |
| 6   | PB0/PP008        | DPG/PG0     | 90 |
| 7   | PC7/RT07         | PH7         | 91 |
| 8   | PC6/RT06         | PH6         | 92 |
| 9   | PC5/RT05         | PH5         | 93 |
| 10  | PC4/RT04         | PH4         | 94 |
| 11  | PC3/RT03         | PH3         | 95 |
| 12  | PC2/PP018        | PH2         | 96 |
| 13  | PC1/PP017        | PH1         | 97 |
| 14  | PC0/PP016        | PH0         | 98 |
| 23  | PD7              | SI1/PI7     | 79 |
| 24  | PD6              | SO1/PI6     | 80 |
| 25  | PD5              | SCK1/PI5    | 81 |
| 26  | PD4              | INT1/PI4    | 82 |
| 27  | PD3              | TO/PI3      | 83 |
| 28  | PD2              | PVR/PI2     | 84 |
| 29  | PD1              | PO/PI1      | 85 |
| 30  | PD0              | PCK/PI0     | 86 |
| 39  | MP               | PJ7         | 15 |
| 40  | RST              | PJ6         | 16 |
| 41  |                  | PJ5         | 17 |
| 42  | XTAL             | PJ4         | 18 |
| 43  | EXTAL            | PJ3         | 19 |
| 44  |                  | PJ2         | 20 |
| 45  | CS0              | PJ1         | 21 |
| 46  | SI0              | PJ0         | 22 |
| 47  | SO0              |             |    |
| 48  | SCK0             | PK0         | 87 |
| 49  | AN11/PF7         |             |    |
| 50  | AN10/PF6         |             |    |
| 51  | AN9/PF5          |             |    |
| 52  | AN8/PF4          |             |    |
| 53  | AN7/PF3          |             |    |
| 54  | AN6/PF2          |             |    |
| 55  | AN5/PF1          |             |    |
| 56  | AN4/PF0          |             |    |
| 57  | AN3              |             |    |
| 58  | AN2              |             |    |
| 59  | AN1              |             |    |
| 60  | AN0              |             |    |
| 61  | AGND             |             |    |
| 62  | AV <sub>DD</sub> |             |    |
| 63  | AV <sub>DD</sub> |             |    |
| 64  | AV <sub>DD</sub> |             |    |
| 65  | AV <sub>DD</sub> |             |    |
| 66  | AV <sub>DD</sub> |             |    |
| 67  | AV <sub>DD</sub> |             |    |
| 68  | AV <sub>DD</sub> |             |    |
| 69  | AV <sub>DD</sub> |             |    |
| 70  | AV <sub>DD</sub> |             |    |
| 71  | AV <sub>DD</sub> |             |    |
| 72  | AV <sub>DD</sub> |             |    |
| 73  | AV <sub>DD</sub> |             |    |
| 74  | AV <sub>DD</sub> |             |    |
| 75  | AV <sub>DD</sub> |             |    |
| 76  | AV <sub>DD</sub> |             |    |
| 77  | AV <sub>DD</sub> |             |    |
| 78  | AV <sub>DD</sub> |             |    |
| 79  | AV <sub>DD</sub> |             |    |
| 80  | AV <sub>DD</sub> |             |    |
| 81  | AV <sub>DD</sub> |             |    |
| 82  | AV <sub>DD</sub> |             |    |
| 83  | AV <sub>DD</sub> |             |    |
| 84  | AV <sub>DD</sub> |             |    |
| 85  | AV <sub>DD</sub> |             |    |
| 86  | AV <sub>DD</sub> |             |    |
| 87  | AV <sub>DD</sub> |             |    |
| 88  | AV <sub>DD</sub> |             |    |
| 89  | AV <sub>DD</sub> |             |    |
| 90  | AV <sub>DD</sub> |             |    |
| 91  | AV <sub>DD</sub> |             |    |
| 92  | AV <sub>DD</sub> |             |    |
| 93  | AV <sub>DD</sub> |             |    |
| 94  | AV <sub>DD</sub> |             |    |
| 95  | AV <sub>DD</sub> |             |    |
| 96  | AV <sub>DD</sub> |             |    |
| 97  | AV <sub>DD</sub> |             |    |
| 98  | AV <sub>DD</sub> |             |    |
| 99  | AV <sub>DD</sub> |             |    |
| 100 | AV <sub>DD</sub> |             |    |

## INPUT

|             |   |
|-------------|---|
| AN0 - AN11  | : A-D CONVERTOR'S ANALOG INPUTS   |
| AVREF       | : A-D CONVERTOR'S REFERENCE VOLTAGE INPUT                               |
| CFG         | : CAPSTAN FG INPUT  |
| CS0         | : SERIAL INTERFACE CHANNEL 0 SELECT INPUT                               |
| DPG,DFG     | : DIRM PG AND FG INPUTS   |
| EC          | : EVENT CONTROL INPUT FOR TIMER/COUNTER                                 |
| EXI0,EXI1   | : FRC CAPTURE UNIT'S EXTERNAL INPUTS                                    |
| EXTAL       | : CRYSTAL CONNECTION OR EXTERNAL CLOCK INPUT FOR SYSTEM CLOCK GENERATOR |
| INT0 - INT2 | : INTERRUPT REQUEST INPUTS (FALLING EDGE ACTIVE)                        |
| PBCTL       | : PLAYBACK CTL PULSE INPUT  |
| PCK         | : PRESCALER'S EXTERNAL CLOCK INPUT                                      |
| PE0,PE1     | : INPUTS OF PORT E (PE2 - PE7 : OUTPUTS)                                |
| PF0 - PF3   | : INPUTS OF PORT F (PF4 - PF7 : OUTPUTS)                                |
| PG0 - PG7   | : INPUTS OF PORT G  |
| PI0         | : INPUT OF PORT I (PI1 - PI7 : INPUTS/OUTPUTS)                          |
| PK0         | : INPUT OF PORT K   |
| SI0,SI1     | : SERIAL DATA INPUTS (CHANNEL 0 AND CHANNEL 1)                          |
| SYNC0,SYNC1 | : COMPOSITE SYNC SIGNAL INPUTS  |

## OUTPUT

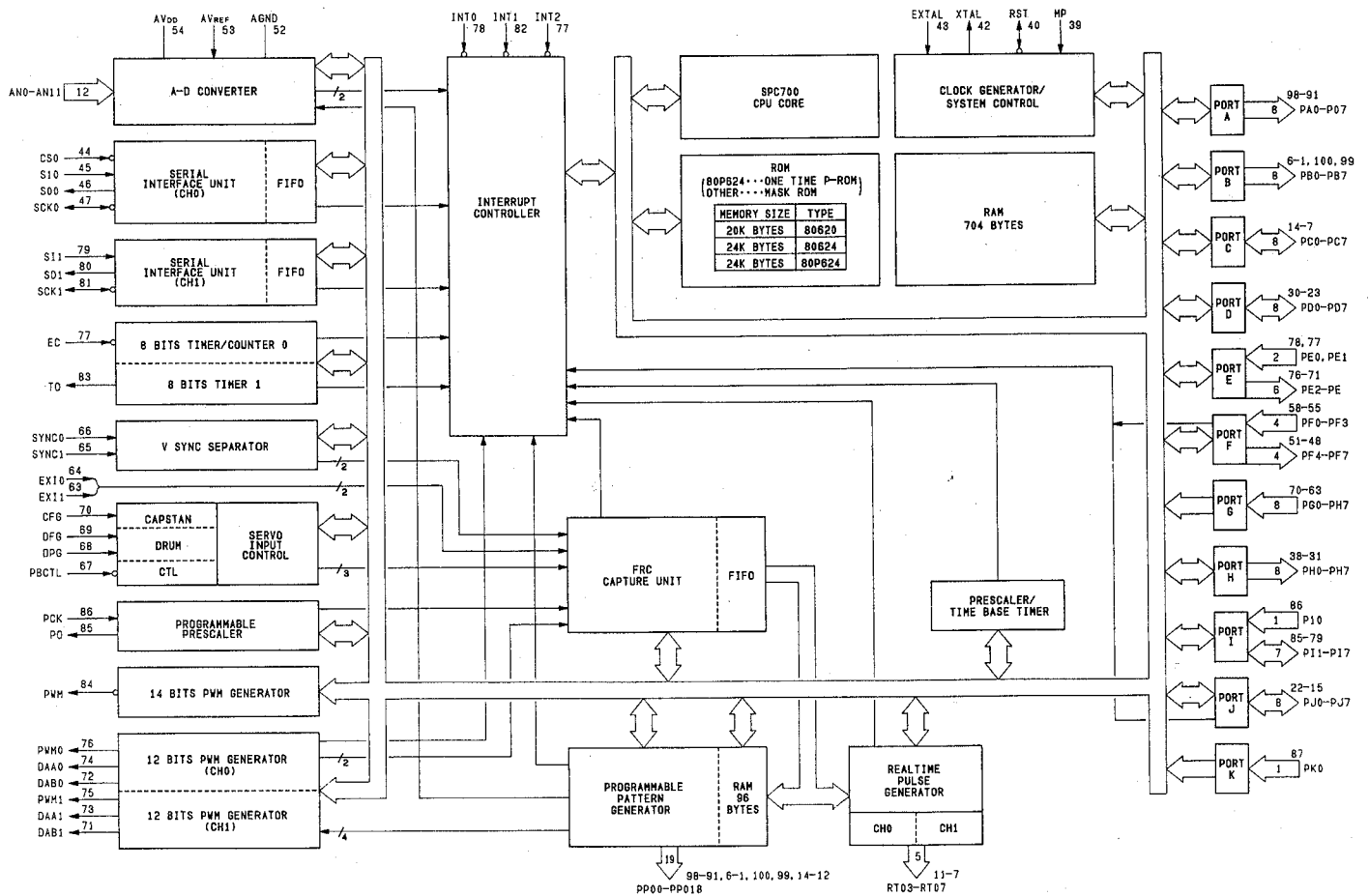
|              |  |
|--------------|--|
| DAA0,DAB0    | : DA GATE PULSE OUTPUTS (12 BITS PWM CHANNEL 0)                    |
| DAA1,DAB1    | : DA GATE PULSE OUTPUTS (12 BITS PWM CHANNEL 1)                    |
| MP           | : MICROPROCESSOR MODE INPUT  |
| PA0 - PA7    | : OUTPUTS OF PORT A  |
| PB0 - PB7    | : OUTPUTS OF PORT B  |
| PE2 - PE7    | : OUTPUTS OF PORT E (PE0, PE1 : INPUTS)                            |
| PF4 - PF7    | : OUTPUTS OF PORT F (PF0 - PF3 : INPUTS)                           |
| PH0 - PH7    | : OUTPUTS OF PORT H (N-CH OPEN DRAIN OUTPUTS)                      |
| PP00 - PP018 | : PROGRAMMABLE PATTERN GENERATOR OUTPUTS                           |
| PO           | : PRESCALER OUTPUT   |
| PWM          | : PULSE WIDTH MODULATION OUTPUT                                    |
| PWM0,PWM1    | : 12 BITS PULSE WIDTH MODULATION OUTPUTS (CHANNEL 0 AND CHANNEL 1) |
| RT03 - RT07  | : REALTIME PULSE GENERATOR OUTPUTS                                 |
| SO0,SO1      | : SERIAL DATA OUTPUTS (CHANNEL 0 AND CHANNEL 1)                    |
| TO           | : TIMER/COUNTER OUTPUT (DUTY 50%)                                  |
| XTAL         | : CRYSTAL CONNECTION   |

## INPUT/OUTPUT

|           |  |
|-----------|--|
| PC0 - PC7 | : INPUTS/OUTPUTS OF PROT C (BIT PROGRAMMABLE)              |
| PD0 - PD7 | : INPUTS/OUTPUTS OF PROT D (4 BITS PROGRAMMABLE)           |
| PI1 - PI7 | : INPUTS/OUTPUTS OF PROT I (BIT PROGRAMMABLE, PIO : INPUT) |
| PJ0 - PJ7 | : INPUTS/OUTPUTS OF PROT J (BIT PROGRAMMABLE)              |
| RST       | : SYSTEM RESET INPUT AND POWER ON RESET OUTPUT             |
| SCK0,SCK1 | : SERIAL CLOCK INPUTS/OUTPUTS (CHANNEL 0 AND CHANNEL 1)    |

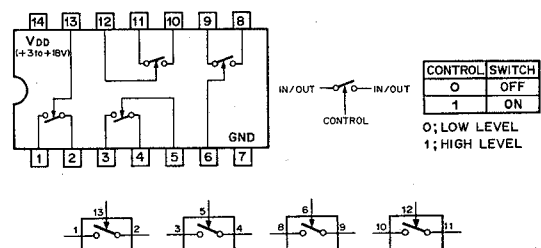
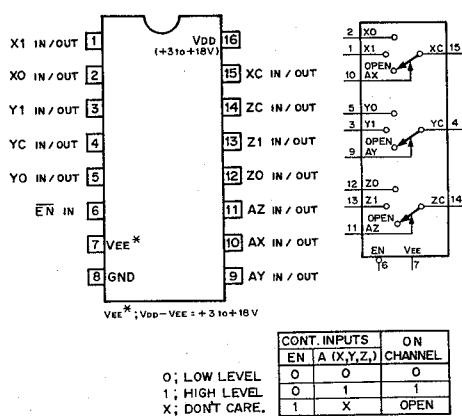
## OTHER

|                        |                                   |
|------------------------|-----------------------------------|
| AGND                   | : A-D CONVERTOR'S GROUND          |
| AV <sub>DD</sub> (+5V) | : A-D CONVERTOR'S V <sub>DD</sub> |

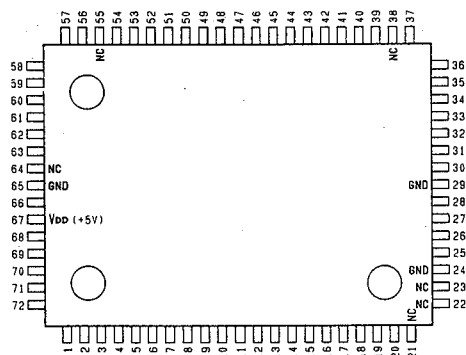


MC14053BF (MOTOROLA) FLAT PACKAGE  
 CMOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS  
 - TOP VIEW -

MC14066BF (MOTOROLA) FLAT PACKAGE  
 CMOS QUAD BILATERAL ANALOG SWITCH  
 - TOP VIEW -

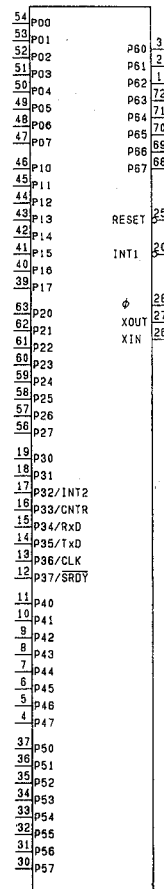


M50747H-161FP (MITUBISHI)  
C-MOS 8-BIT MICROCOMPUTER  
- TOP VIEW -



(V<sub>DD</sub> = +5V)

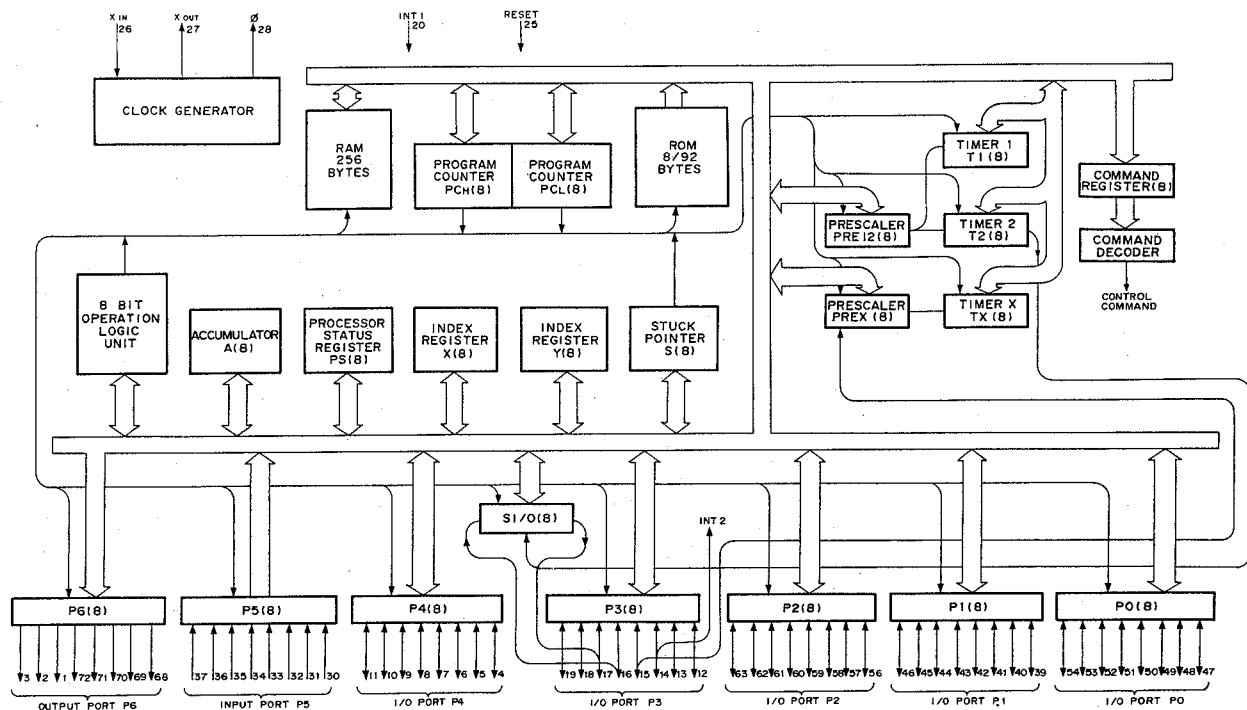
| Pin No. | I/O | SIGNAL   | Pin No. | I/O | SIGNAL | Pin No. | I/O | SIGNAL | Pin No. | I/O | SIGNAL          |
|---------|-----|----------|---------|-----|--------|---------|-----|--------|---------|-----|-----------------|
| 1       | 0   | P62      | 19      | I/O | P30    | 37      | I   | P50    | 55      | -   | NC              |
| 2       | 0   | P61      | 20      | I   | INT1   | 38      | -   | NC     | 56      | I/O | P27             |
| 3       | 0   | P60      | 21      | -   | NC     | 39      | I/O | P17    | 57      | I/O | P26             |
| 4       | I/O | P47      | 22      | -   | NC     | 40      | I/O | P16    | 58      | I/O | P25             |
| 5       | I/O | P46      | 23      | -   | NC     | 41      | I/O | P15    | 59      | I/O | P24             |
| 6       | I/O | P45      | 24      | -   | NC     | 42      | I/O | P14    | 60      | I/O | P23             |
| 7       | I/O | P44      | 25      | I   | RESET  | 43      | I/O | P13    | 61      | I/O | P22             |
| 8       | I/O | P43      | 26      | I   | XIN    | 44      | I/O | P12    | 62      | I/O | P21             |
| 9       | I/O | P42      | 27      | 0   | XOUT   | 45      | I/O | P11    | 63      | I/O | P20             |
| 10      | I/O | P41      | 28      | 0   | φ      | 46      | I/O | P10    | 64      | -   | NC              |
| 11      | I/O | P40      | 29      | -   | GND    | 47      | I/O | P07    | 65      | -   | GND             |
| 12      | I/O | P37/SRDY | 30      | I   | P57    | 48      | I/O | P06    | 66      | -   | NC              |
| 13      | I/O | P36/CLK  | 31      | I   | P56    | 49      | I/O | P05    | 67      | -   | V <sub>CC</sub> |
| 14      | I/O | P35/TxD  | 32      | I   | P55    | 50      | I/O | P04    | 68      | 0   | P67             |
| 15      | I/O | P34/RxD  | 33      | I   | P54    | 51      | I/O | P03    | 69      | 0   | P66             |
| 16      | I/O | P33/CNTR | 34      | I   | P53    | 52      | I/O | P02    | 70      | 0   | P65             |
| 17      | I/O | P32/INT2 | 35      | I   | P52    | 53      | I/O | P01    | 71      | 0   | P64             |
| 18      | I/O | P31      | 36      | I   | P51    | 54      | I/O | P00    | 72      | 0   | P63             |



**INPUT**  
INT1 : INTERRUPT INPUT (MSB)  
P50-P57 : 8-BIT INPUT PORT P5  
RESET : RESET WHEN SET TO "L" FOR 2us OR MORE.  
XIN : CLOCK INPUT

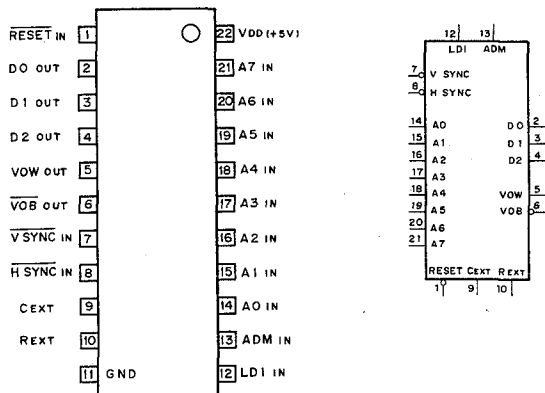
**OUTPUT**  
φ : TIMING OUTPUT  
P60-P67 : 8-BIT OUTPUT PORT P6  
XOUT : CLOCK OUTPUT

**INPUT/OUTPUT**  
P00-P07 : 8-BIT I/O PORT P0  
P10-P17 : 8-BIT I/O PORT P1  
P20-P27 : 8-BIT I/O PORT P2  
P30-P37 : 8-BIT I/O PORT P3  
P40-P47 : 8-BIT I/O PORT P4  
P32/INT2 : PORT/INTERRUPT INPUT  
P33/CNTR : PORT/CONTROL INPUT OUTPUT  
P34/RxD : RECEIVED DATA  
P35/TxD : TRANSMITTED DATA  
P36/CLK : PORT/CLOCK INPUT OUTPUT  
P37/SRDY : SERL IN READY



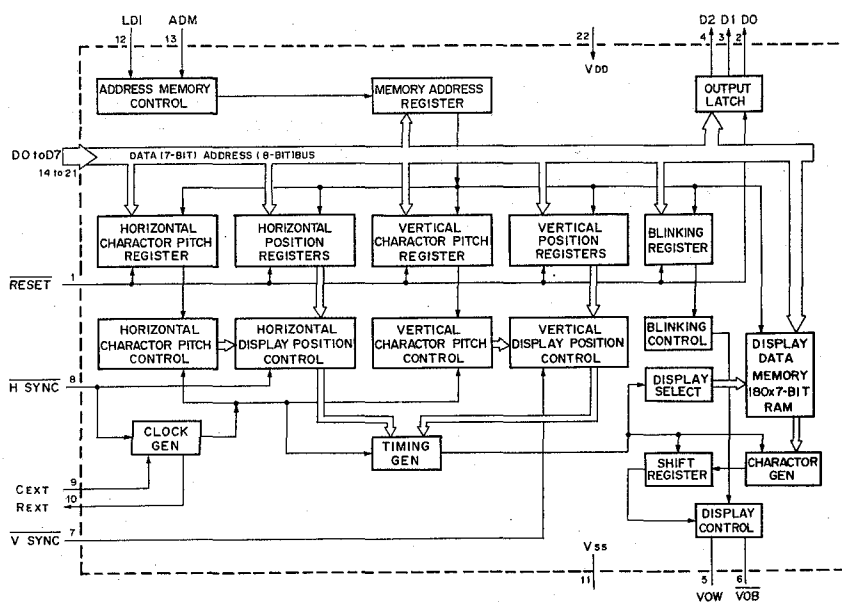
## MB88303 (FUJITSU)

N-MOS PROGRAMMABLE TV DISPLAY CONTROLLER  
- TOP VIEW -



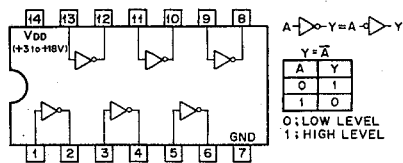
| bs-b0 | 0000 | 0001 | 0010 | 0011 | 0100 | 0101 | 0110 | 0111 | 1000 | 1001 | 1010 | 1011 | 1100 | 1101 | 1110 | 1111  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| bs-b4 | 00   | A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    | .    | BLANK |
| 01    | N    | O    | P    | Q    | R    | S    | T    | U    | V    | W    | X    | Y    | Z    | :    |      | (     |
| 10    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | ?    | !    | '    | .    | BACK | )     |
| 11    | ↑    | ↓    | ←    | →    | +    | -    | *    | /    | =    | &    |      |      |      |      |      |       |

ADM : ADDRESS INCREMENT MODE  
A0 to A7 : ADDRESS INPUT  
DO to D2 : DATA OUTPUT  
CEXT : EXT CAPACITOR FOR OSC  
LDI : LOAD DATA AND INSTRUCTION  
VOB : VIDEO BLACK OUT  
VOW : VIDEO WHITE OUT  
REXT : EXT RESISTOR FOR OSC



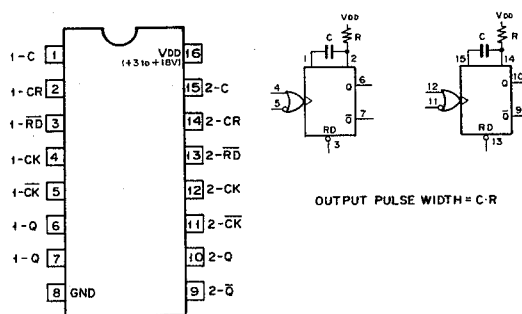
## MC14069UBF (MOTOROLA)

C-MOS INVERTER  
- TOP VIEW -

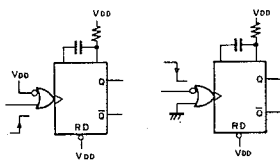


## MC14538BF (MOTOROLA) FLAT PACKAGE

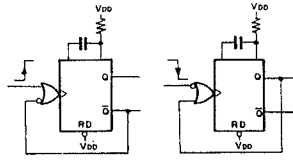
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATORS  
- TOP VIEW -



RETRIGGERABLE M.M.V.

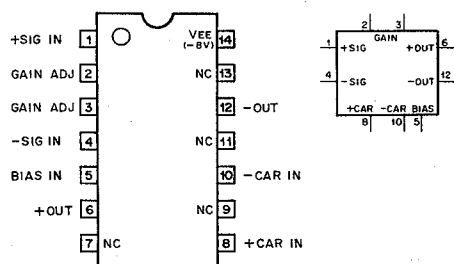


NON-RETRIGGERABLE M.M.V.



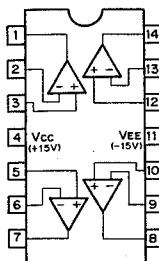
## MC1496M (MOTOROLA) FLAT PACKAGE

BALANCED MODULATOR/DEMODULATOR  
- TOP VIEW -



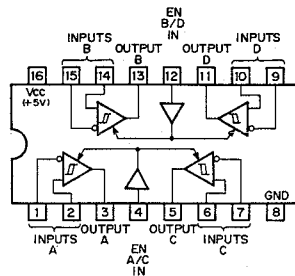
## MC34184M (MOTOROLA) FLAT PACKAGE

JFET INPUT OPERATIONAL AMPLIFIER  
- TOP VIEW -



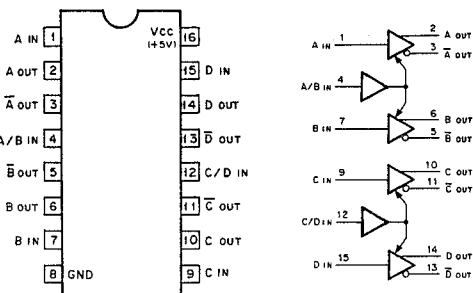
## MC3486N (TI)

QUAD RS-422/423 LINE RECEIVER WITH 3-STATE OUTPUTS  
- TOP VIEW -



## MC3487N (MOTOROLA)

QUAD RS-422 LINE DRIVER WITH 3-STATE OUTPUTS  
- TOP VIEW -

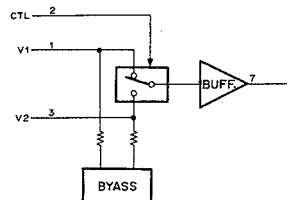
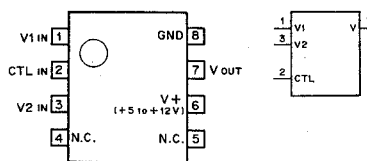


| A, B, C, D<br>IN | A/B, C/D<br>IN | A, B, C, D<br>OUT | A, B, C, D<br>OUT |
|------------------|----------------|-------------------|-------------------|
| 0                | 0              | 0                 | 1                 |
| 1                | 0              | 1                 | 0                 |
| X                | 1              | Hi-Z              | Hi-Z              |

0: LOW LEVEL  
1: HIGH LEVEL  
X: DON'T CARE  
Hi-Z: HIGH IMPEDANCE

## NJM2233BM (JRC) FLAT PACKAGE

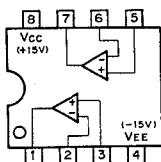
2-INPUT VIDEO SIGNAL SWITCH  
- TOP VIEW -



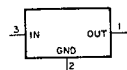
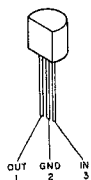
| CTL | V  |
|-----|----|
| 0   | V1 |
| 1   | V2 |

0: LOW LEVEL  
1: HIGH LEVEL

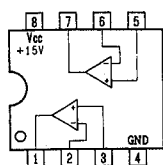
NJM4556M-A (JRC) FLAT PACKAGE  
RC4556MA (RAYTHEON) FLAT PACKAGE  
OPERATIONAL AMPLIFIER  
(WIDE BAND, DECOMPENSATED)  
- TOP VIEW -



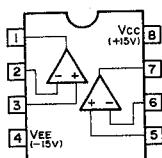
NJM78L05A (JRC) + 5V (100mA)  
RC78L05A (RAYTHEON) + 5V (100mA)  
POSITIVE VOLTAGE REGULATOR



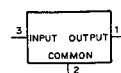
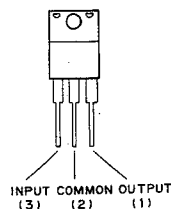
RC3414M (NJM) FLAT PACKAGE  
DUAL OPERATIONAL AMPLIFIER  
- TOP VIEW -



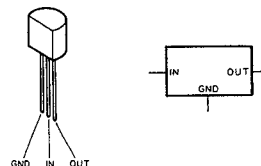
NJM4558M (JRC) FLAT PACKAGE  
NJM4562M (JRC) FLAT PACKAGE  
RC4558M (RAYTHEON) FLAT PACKAGE  
RC4560M (RAYTHEON) FLAT PACKAGE  
DUAL OPERATIONAL AMPLIFIER  
- TOP VIEW -



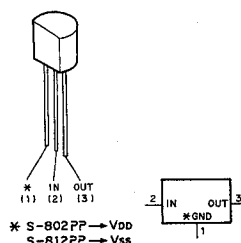
RC7805FA (RAYTHEON) + 5V  
POSITIVE VOLTAGE REGULATOR  
- FRONT VIEW -



NJM78L05A (JRC) - 5V  
RC78L05A (RAYTHEON) - 5V  
NEGATIVE VOLTAGE REGULATOR (100mA)

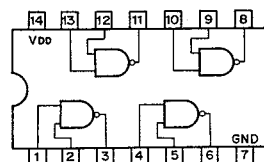


S-80230AG (SEIKO I AND E) - 3V  
S-81230AG (SEIKO I AND E) + 3V  
C-MOS VOLTAGE REGULATOR



\* S-802PP → V<sub>DD</sub>  
S-812PP → V<sub>SS</sub>

SN74HC00ANS (TI) FLAT PACKAGE  
C-MOS QUAD 2-INPUT NAND GATES  
- TOP VIEW -



$$A \text{ --- } B \text{ --- } Y = A \cdot B$$

$$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$$

| A | B | Y |
|---|---|---|
| 0 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

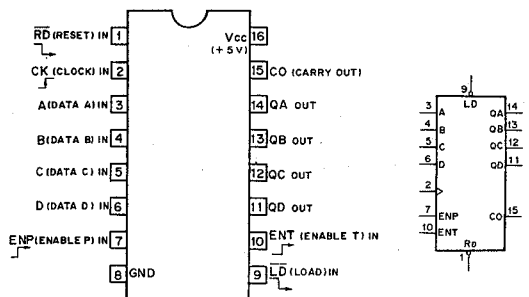
0; LOW LEVEL  
1; HIGH LEVEL

NOTE:

| TYPE          | V <sub>DD</sub> |
|---------------|-----------------|
| TC74AC00 TYPE | +2 to +5.5V     |
| MC74HCT00N    | +5V             |
| 74ACT00 TYPE  | +4.5 to +5.5V   |
| OTHER TYPES   | +2 to +6V       |



SN74ALS163BNS (TI) FLAT PACKAGE  
TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER  
- TOP VIEW -



## MODE SELECTION

| CONTROL INPUTS |    |     |     | MODE                 |
|----------------|----|-----|-----|----------------------|
| Rd             | LD | ENP | ENT |                      |
| 0              | X  | X   | X   | RESET (SYNCHRONOUS)  |
| 1              | 0  | X   | X   | PRESET (SYNCHRONOUS) |
| 1              | 1  | 0   | X   | NO COUNT             |
| 1              | 1  | X   | 0   | NO COUNT             |
| 1              | 1  | 1   | 1   | COUNT                |

0: LOW LEVEL  
1: HIGH LEVEL  
X: DON'T CARE

## CARRY OUTPUT "CO"

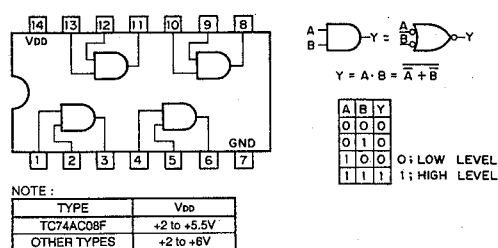


CO IS HIGH WHEN ENT INPUT IS HIGH AND COUNT IS 15.

## COUNT SEQUENCE

| COUNT | OUTPUTS |    |    |    |
|-------|---------|----|----|----|
|       | QD      | QC | QB | QA |
| 0     | 0       | 0  | 0  | 0  |
| 1     | 0       | 0  | 0  | 1  |
| 2     | 0       | 0  | 1  | 0  |
| 3     | 0       | 0  | 1  | 1  |
| 4     | 0       | 1  | 0  | 0  |
| 5     | 0       | 1  | 0  | 1  |
| 6     | 0       | 1  | 1  | 0  |
| 7     | 0       | 1  | 1  | 1  |
| 8     | 1       | 0  | 0  | 0  |
| 9     | 1       | 0  | 0  | 1  |
| 10    | 1       | 0  | 1  | 0  |
| 11    | 1       | 0  | 1  | 1  |
| 12    | 1       | 1  | 0  | 0  |
| 13    | 1       | 1  | 0  | 1  |
| 14    | 1       | 1  | 1  | 0  |
| 15    | 1       | 1  | 1  | 1  |

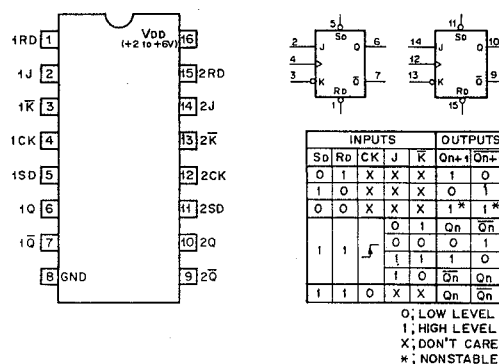
SN74HC08ANS (TI) FLAT PACKAGE  
C-MOS QUAD 2-INPUT AND GATES  
- TOP VIEW -



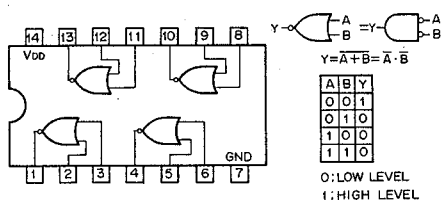
## NOTE:

| TYPE        | VDD         |
|-------------|-------------|
| TC74AC08F   | +2 to +5.5V |
| OTHER TYPES | +2 to +6V   |

SN74HC109ANS (TI) FLAT PACKAGE  
C-MOS J-K FLIP-FLOP WITH DIRECT SET/RESET  
- TOP VIEW -



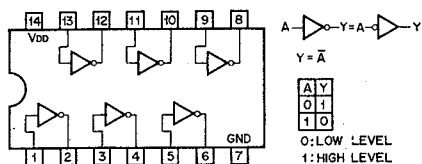
SN74HC02ANS (TI) FLAT PACKAGE  
C-MOS QUAD 2-INPUT NOR GATES  
- TOP VIEW -



## NOTE:

| TYPE                    | VDD           |
|-------------------------|---------------|
| TC74AC02F               | +2 to +5.5V   |
| 74ACT02SJ<br>TC74ACT02F | +4.5 to +5.5V |
| OTHER TYPES             | +2 to +6V     |

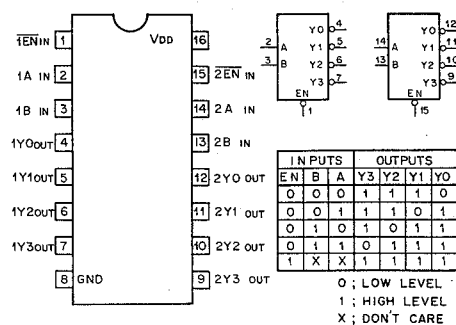
SN74HC04ANS (TI) FLAT PACKAGE  
C-MOS HEX INVERTERS  
- TOP VIEW -



## NOTE:

| TYPE          | VDD           |
|---------------|---------------|
| 74HCT04 TYPE  | +5V           |
| TC74AC04 TYPE | +2 to +5.5V   |
| 74ACT04 TYPE  | +4.5 to +5.5V |
| OTHER TYPES   | +2 to +6V     |

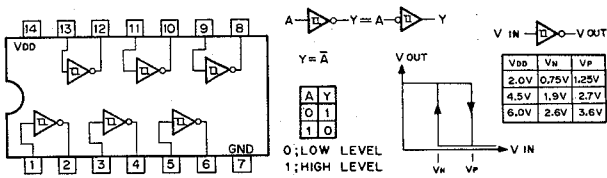
SN74HC139ANS (TI) FLAT PACKAGE  
C-MOS DUAL 2-TO-4 DECODER/DEMULPLEXER  
- TOP VIEW -



## NOTE:

| TYPE      | VDD         |
|-----------|-------------|
| 74AC/74HC | +2 to +6V   |
| 74ACT     | +5V         |
| TC74AC139 | +2 to +5.5V |

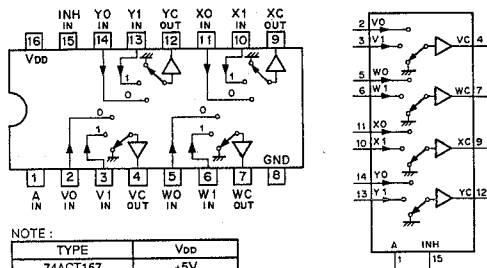
## SN74HC14ANS (TI) FLAT PACKAGE

C-MOS HEX SCHMITT TRIGGER INVERTERS  
- TOP VIEW -

NOTE:

| TYPE          | VDD         |
|---------------|-------------|
| TC74AC14 TYPE | +2 to +5.5V |
| OTHER TYPES   | +2 to +6V   |

## SN74HC157ANS (TI) FLAT PACKAGE

C-MOS QUAD 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER  
- TOP VIEW -

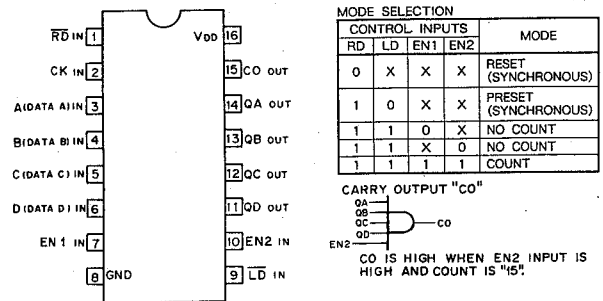
NOTE:

| TYPE                     | VDD         |
|--------------------------|-------------|
| 74ACT157                 | +5V         |
| TC74AC157P<br>TC74AC157F | +2 to +5.5V |
| OTHER TYPES              | +2 to +6V   |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE

| CONT. IN | A | ON CHANNEL |
|----------|---|------------|
| INH      | 0 | 0          |
|          | 0 | 1          |
|          | 1 | X          |

## SN74HC163ANS (TI) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER  
- TOP VIEW -

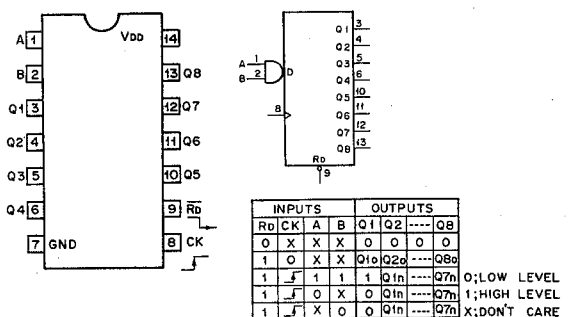
NOTE:

| TYPE           | VDD           |
|----------------|---------------|
| 74ACT163 TYPE  | +4.5 to +5.5V |
| TC74AC163 TYPE | +2 to +5.5V   |
| OTHER TYPES    | +2 to +6V     |

COUNT SEQUENCE

| COUNT | QD | QC | QB | QA |
|-------|----|----|----|----|
| 0     | 0  | 0  | 0  | 0  |
| 1     | 0  | 0  | 0  | 1  |
| 2     | 0  | 0  | 1  | 0  |
| 3     | 0  | 0  | 1  | 1  |
| 4     | 0  | 1  | 0  | 0  |
| 5     | 0  | 1  | 0  | 1  |
| 6     | 0  | 1  | 1  | 0  |
| 7     | 0  | 1  | 1  | 1  |
| 8     | 1  | 0  | 0  | 0  |
| 9     | 1  | 0  | 0  | 1  |
| 10    | 1  | 0  | 1  | 0  |
| 11    | 1  | 0  | 1  | 1  |
| 12    | 1  | 1  | 0  | 0  |
| 13    | 1  | 1  | 0  | 1  |
| 14    | 1  | 1  | 1  | 0  |
| 15    | 1  | 1  | 1  | 1  |

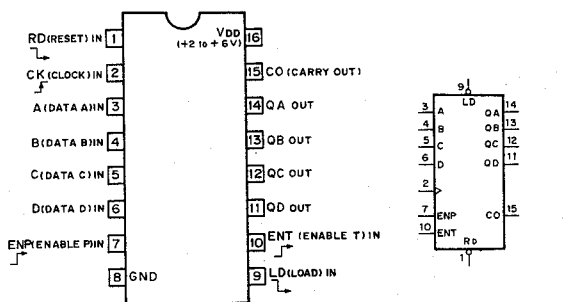
## SN74HC164ANS (TI) FLAT PACKAGE

C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER  
- TOP VIEW -

NOTE:

| TYPE           | VDD         |
|----------------|-------------|
| TC74AC164 TYPE | +2 to +5.5V |
| OTHER TYPES    | +2 to +6V   |

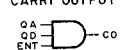
## SN74HC160NS (TI)

C-MOS SYNCHRONOUS PRESETTABLE 4-BIT DECADE COUNTER  
- TOP VIEW -

MODE SELECTION

| MODE SELECTION |    |     |     | MODE                    |
|----------------|----|-----|-----|-------------------------|
| CONTROL INPUTS |    |     |     |                         |
| Rd             | LD | ENP | ENT |                         |
| 0              | x  | x   | x   | RESET<br>(ASYNCHRONOUS) |
| 1              | 0  | x   | x   | PRESET<br>(SYNCHRONOUS) |
| 1              | 1  | 0   | x   | NO COUNT                |
| 1              | 1  | x   | 0   | NO COUNT                |
| 1              | 1  | 1   | 1   | COUNT                   |

CARRY OUTPUT "CO"



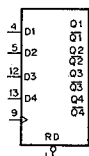
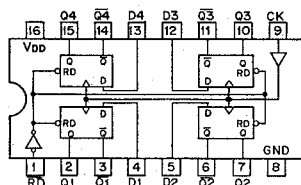
CO IS HIGH WHEN ENT INPUT IS HIGH AND COUNT IS "9".

COUNT SEQUENCE

| COUNT | QD | QC | QB | QA | CO |
|-------|----|----|----|----|----|
| 0     | 0  | 0  | 0  | 0  | 0  |
| 1     | 0  | 0  | 0  | 1  | 0  |
| 2     | 0  | 0  | 1  | 0  | 0  |
| 3     | 0  | 0  | 1  | 1  | 0  |
| 4     | 0  | 1  | 0  | 0  | 0  |
| 5     | 0  | 1  | 0  | 1  | 0  |
| 6     | 0  | 1  | 1  | 0  | 0  |
| 7     | 0  | 1  | 1  | 1  | 0  |
| 8     | 1  | 0  | 0  | 0  | 0  |
| 9     | 1  | 0  | 0  | 1  | 1  |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE

SN74HC175ANS (TI) FLAT PACKAGE  
C-MOS QUAD D-TYPE FLIP-FLOPS WITH RESET  
- TOP VIEW -



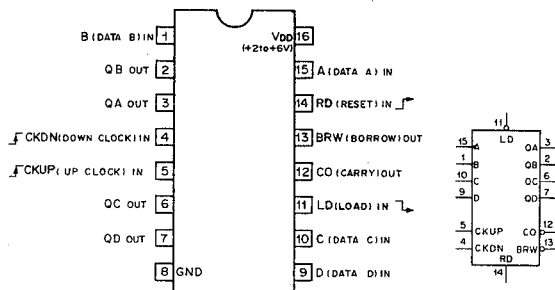
| RD | CK | D | Q | 0 |
|----|----|---|---|---|
| 0  | X  | X | 0 | 1 |
| 1  | X  | 0 | 0 | 1 |
| 1  | X  | 1 | 0 | 1 |
| 1  | 0  | X | 0 | 1 |
| 1  | 0  | X | 1 | 0 |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE  
Q0; NO CHANGE  
Q0; NO CHANGE

NOTE:

| TYPE          | VDD           |
|---------------|---------------|
| TC74AC175F    | +2 to +5.5V   |
| 74ACT175 TYPE | +4.5 to +5.5V |
| OTHER TYPES   | +2 to +6V     |

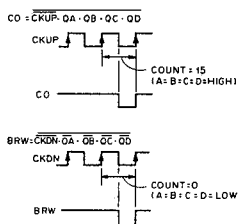
SN74HC193ANS (TI) FLAT PACKAGE  
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER  
- TOP VIEW -



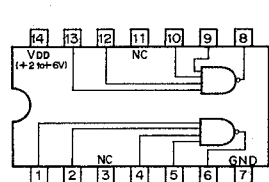
| CONTROL INPUT   | MODE          |
|-----------------|---------------|
| RD LD CKUP CKDN | MODE          |
| 1 X X X         | RESET TO ZERO |
| 0 0 X X         | PRESET        |
| 0 1 X 1         | UP COUNT      |
| 0 1 1 X         | DOWN COUNT    |
| 0 1 1 1         | NO COUNT      |

| COUNT | OUTPUT      |
|-------|-------------|
|       | QD QC QB QA |
| 0     | 0 0 0 0     |
| 1     | 0 0 0 1     |
| 2     | 0 0 1 0     |
| 3     | 0 0 1 1     |
| 4     | 0 1 0 0     |
| 5     | 0 1 0 1     |
| 6     | 0 1 1 0     |
| 7     | 0 1 1 1     |
| 8     | 1 0 0 0     |
| 9     | 1 0 0 1     |
| 10    | 1 0 1 0     |
| 11    | 1 0 1 1     |
| 12    | 1 1 0 0     |
| 13    | 1 1 0 1     |
| 14    | 1 1 1 0     |
| 15    | 1 1 1 1     |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE



SN74HC20ANS (TI) FLAT PACKAGE  
C-MOS 4-INPUT POSITIVE-NAND GATE  
- TOP VIEW -



$$Y = A \cdot B \cdot C \cdot D = A + B + C + D$$

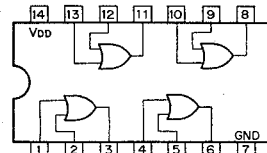
| A | B | C | D | Y |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 1 |
| 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 1 | 0 | 1 |
| 0 | 0 | 1 | 1 | 1 |
| 0 | 1 | 0 | 0 | 1 |
| 0 | 1 | 0 | 1 | 1 |
| 0 | 1 | 1 | 0 | 1 |
| 0 | 1 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 | 1 |
| 1 | 0 | 0 | 1 | 1 |
| 1 | 0 | 1 | 0 | 1 |
| 1 | 0 | 1 | 1 | 1 |
| 1 | 1 | 0 | 0 | 1 |
| 1 | 1 | 0 | 1 | 1 |
| 1 | 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 | 0 |

0; LOW LEVEL  
1; HIGH LEVEL

NOTE:

| TYPE        | VDD          |
|-------------|--------------|
| TC74AC20    | +2V to +5.5V |
| OTHER TYPES | +2V to +6V   |

SN74HC32ANS (TI) FLAT PACKAGE  
C-MOS QUAD 2-INPUT OR GATES  
- TOP VIEW -



$$Y = A + B = \overline{A \cdot B}$$

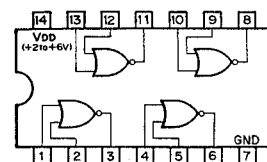
| A | B | Y |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

0; LOW LEVEL  
1; HIGH LEVEL

NOTE:

| TYPE          | VDD         |
|---------------|-------------|
| TC74AC32 TYPE | +2 to +5.5V |
| OTHER TYPES   | +2 to +6V   |

SN74HC36NS (TI) FLAT PACKAGE  
C-MOS 2-INPUT NOR GATE  
- TOP VIEW -

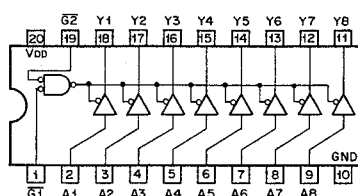


$$Y = A + B = \overline{A \cdot B}$$

| A | B | Y |
|---|---|---|
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 0 |

0; LOW LEVEL  
1; HIGH LEVEL

SN74HC541ANS (TI) FLAT PACKAGE  
C-MOS BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS  
- TOP VIEW -



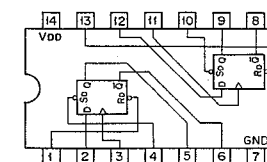
| G1 | G2 | A | Y    |
|----|----|---|------|
| 0  | 0  | 0 | 0    |
| 0  | 0  | 1 | 1    |
| 1  | X  | X | HI-Z |
| X  | 1  | X | HI-Z |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE  
HI-Z; HIGH IMPEDANCE

NOTE:

| TYPE    | VDD         |
|---------|-------------|
| AC      | +2 to +5.5V |
| HC      | +2 to +6V   |
| ACT/HCT | +5V         |

SN74HC74ANS (TI) FLAT PACKAGE  
C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET  
- TOP VIEW -



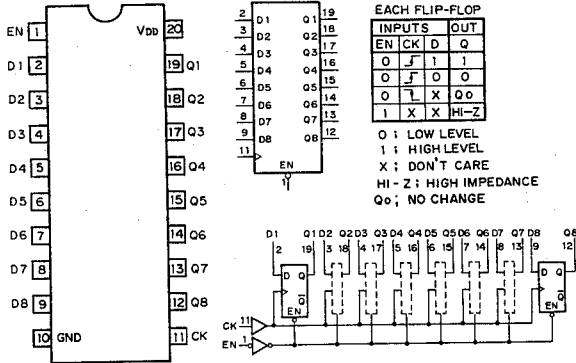
| INPUTS |    |    |   | OUTPUTS |     |
|--------|----|----|---|---------|-----|
| SD     | R0 | CK | D | Qn+1    | Qn+ |
| 0      | 1  | X  | X | 1       | 0   |
| 1      | 0  | X  | X | 0       | 1   |
| 0      | 0  | X  | X | 1       | 1   |
| 1      | 1  | 1  | 1 | 1       | 0   |
| 1      | 1  | 1  | 0 | 0       | 1   |
| 1      | 1  | 0  | X | Qn      | Qn  |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE

NOTE:

| TYPE          | VDD           |
|---------------|---------------|
| TC74HCT74AF   | +5V           |
| TC74AC74 TYPE | +2 to +5.5V   |
| 74ACT74 TYPE  | +4.5 to +5.5V |
| OTHER TYPES   | +2 to +6V     |

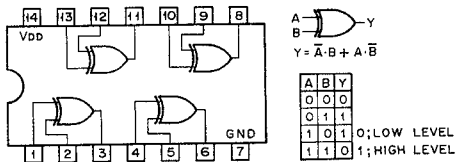
SN74HC574ANS (TI) FLAT PACKAGE  
C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP  
- TOP VIEW -



NOTE:

| TYPE        | V <sub>DD</sub> |
|-------------|-----------------|
| 74AC/74HC   | +2 to +6V       |
| 74ACT/74HCT | +5V             |
| TC74AC574F  | +2 to +5.5V     |

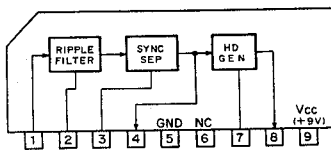
SN74HC86ANS (TI) FLAT PACKAGE  
TC74HC86AF (TOSHIBA) FLAT PACKAGE  
C-MOS QUAD EXCLUSIVE OR GATES  
- TOP VIEW -



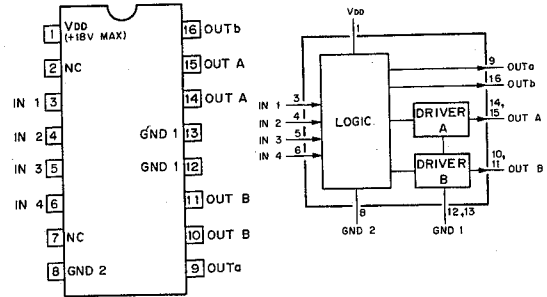
NOTE:

| TYPE          | V <sub>DD</sub> |
|---------------|-----------------|
| TC74AC86 TYPE | +2 to +5.5V     |
| OTHER TYPES   | +2 to +6V       |

TA7357AP (TOSHIBA)  
SYNC SEPARATOR/HD PULSE GENERATOR  
- SIDE VIEW -



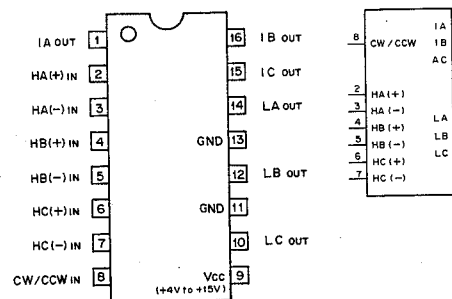
TA7733F (TOSHIBA) FLAT PACKAGE  
FUNCTIONABLE BRIDGE DRIVER  
- TOP VIEW -



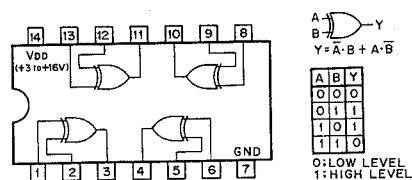
| CONTROL         | INPUTS |     |     |     | OUTPUTS |      |      |      | MODE    |
|-----------------|--------|-----|-----|-----|---------|------|------|------|---------|
|                 | IN1    | IN2 | IN3 | IN4 | OUTA    | OUTB | OUTA | OUTB |         |
| 2-INPUT CONTROL | 1      | 0   | 1   | 1   | ON      | ON   | ON   | ON   | FWD     |
|                 | 0      | 1   | 1   | 1   | ON      | ON   | ON   | ON   | REV     |
|                 | 1      | 1   | 1   | 1   | ON      | ON   | ON   | ON   | STOP    |
| 1-INPUT CONTROL | 1      | 0   | 0   | 1   | ON      | ON   | ON   | ON   | A ON    |
|                 | 0      | 0   | 0   | 1   | ON      | ON   | ON   | ON   | B ON    |
|                 | X      | 1   | 0   | 1   | ON      | ON   | ON   | ON   | INHIBIT |

0: LOW LEVEL  
1: HIGH LEVEL  
X: DON'T CARE

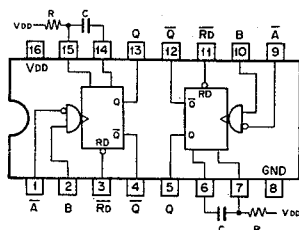
TA7745F (TOSHIBA) FLAT PACKAGE  
DC MOTOR DRIVER  
- TOP VIEW -



TC4030BFHB (TOSHIBA) FLAT PACKAGE  
C-MOS EXCLUSIVE OR GATE  
- TOP VIEW -



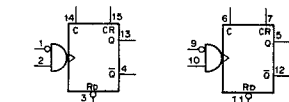
TC74HC123AF (TOSHIBA) FLAT PACKAGE  
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATORS  
- TOP VIEW -



| INPUT |           | OUTPUT |  |
|-------|-----------|--------|--|
| RD    | A B Q Q   |        |  |
| 0     | X X 0 1   |        |  |
| 1     | 1 1 X 0 1 |        |  |
| 1     | X 0 0 1   |        |  |
| 1     | 0 1 1 1   |        |  |
| 1     | 1 1 1 1   |        |  |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE

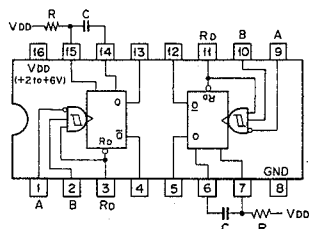
OUTPUT PULSE WIDTH =  $0.46CR$



NOTE:

| TYPE         | VDD       |
|--------------|-----------|
| TC74HCT123AF | +5V       |
| OTHER TYPES  | +2 to +6V |

TC74HC221AF (TOSHIBA) FLAT PACKAGE  
C-MOS MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT  
- TOP VIEW -

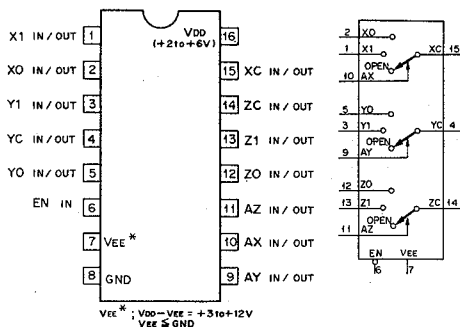


| INPUTS |         | OUTPUTS |  |
|--------|---------|---------|--|
| RD     | A B Q Q |         |  |
| 0      | X X 0 1 |         |  |
| X      | 1 X 0 1 |         |  |
| X      | X 0 0 1 |         |  |
| 1      | 0 1 1 1 |         |  |
| 1      | 1 1 1 1 |         |  |

0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE

OUTPUT PULSE WIDTH =  $0.7CR$

TC74HC4053AF (TOSHIBA) FLAT PACKAGE  
C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXER/DEMULPLEXER  
- TOP VIEW -

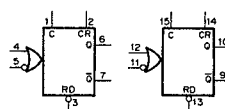
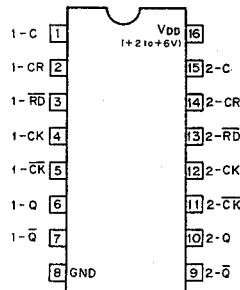


VEE\*: VDD-VEE = +3 to +12V  
VEE ≤ GND

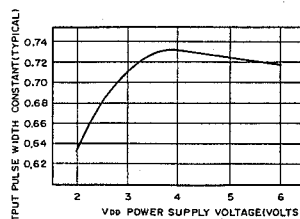
0; LOW LEVEL  
1; HIGH LEVEL  
X; DON'T CARE.

| CONT. INPUTS |           | ON CHANNEL |  |
|--------------|-----------|------------|--|
| EN           | A (X,Y,Z) |            |  |
| 0            | 0         | 0          |  |
| 0            | 1         | 1          |  |
| 1            | X         | OPEN       |  |

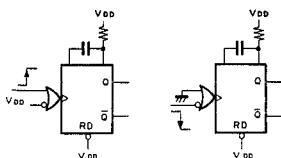
TC74HC4538AF (TOSHIBA) FLAT PACKAGE  
C-MOS DUAL RETRIGGERABLE / NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR  
- TOP VIEW -



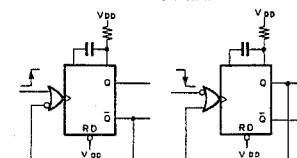
OUTPUT PULSE WIDTH =  $k \cdot C \cdot R$



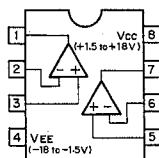
RETRIGGERABLE M.M.V



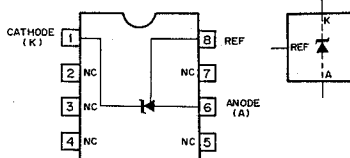
NON-RETRIGGERABLE M.M.V



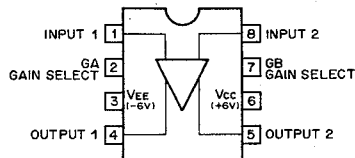
TL082CPS (TI) FLAT PACKAGE  
OPERATIONAL AMPLIFIER  
(JFET INPUT)  
- TOP VIEW -



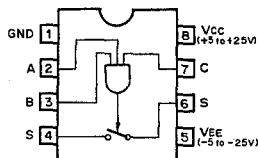
TL431CPS (TI) FLAT PACKAGE  
ADJUSTABLE PRECISION SHUNT REGULATOR  
- TOP VIEW -



TL592PS (TI) FLAT PACKAGE  
DIFFERENTIAL VIDEO AMPLIFIER  
- TOP VIEW -



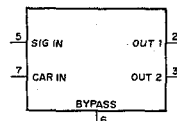
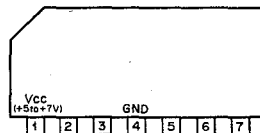
TL610CPS (TI) FLAT PACKAGE  
MOS ANALOG SWITCH  
- TOP VIEW -



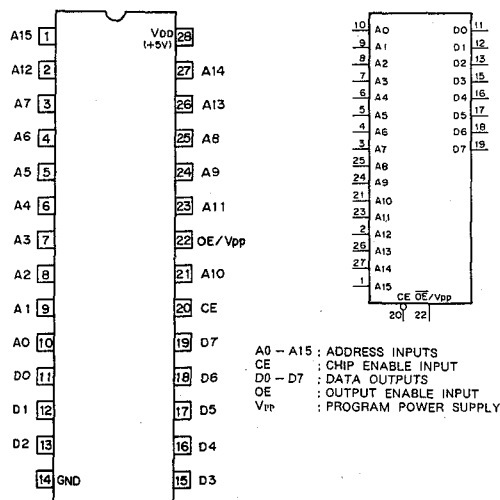
| CONT IN |   |   |            | S |
|---------|---|---|------------|---|
| A       | B | C |            |   |
| 0       | X | X | OFF(OPEN)  |   |
| X       | 0 | X | OFF(OPEN)  |   |
| X       | X | 0 | OFF(OPEN)  |   |
| 1       | 1 | 1 | ON(CLOSED) |   |

0: LOW LEVEL  
1: HIGH LEVEL  
X: DON'T CARE

UPC1037HA (NEC)  
DOUBLE-BALANCED MODULATOR  
- SIDE VIEW -

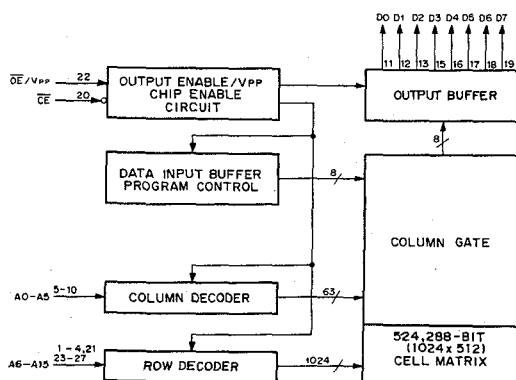


TMS27C512-20JL (TI)  
C-MOS 512K (65,536x8 = 524,288)-BIT ERASABLE PROM  
- TOP VIEW -

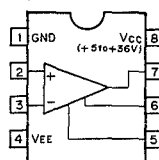


| A <sub>n</sub>  | CE | OE/V <sub>PP</sub> | V <sub>DD</sub> | D <sub>n</sub>   | FUNCTION       |
|-----------------|----|--------------------|-----------------|------------------|----------------|
| A <sub>IN</sub> | 0  | 0                  | +5V             | D <sub>OUT</sub> | READ           |
| A <sub>IN</sub> | 0  | 1                  | +5V             | HI-Z             | OUTPUT DISABLE |
| X               | 1  | X                  | +5V             | HI-Z             | STANDBY        |
| A <sub>IN</sub> | 0  | +12.5V             | +6V             | D <sub>IN</sub>  | PGM            |
| A <sub>IN</sub> | 0  | 0                  | +6V             | D <sub>OUT</sub> | PGM VERIFY     |
| X               | 1  | +12.5V             | +6V             | HI-Z             | PGM INH        |

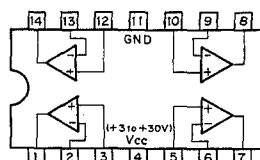
0: LOW LEVEL  
1: HIGH LEVEL  
X: DON'T CARE  
HI-Z: HIGH IMPEDANCE



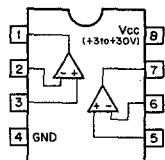
UPC311G2 (NEC) FLAT PACKAGE  
VOLTAGE COMPARATOR  
- TOP VIEW -



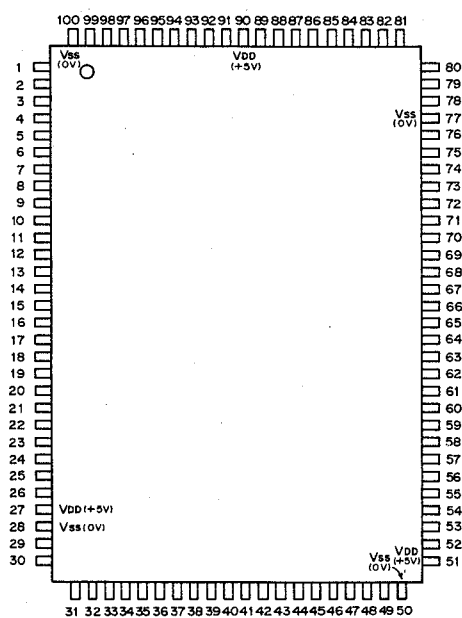
UPC324G2 (NEC) FLAT PACKAGE  
QUAD OPERATIONAL AMPLIFIERS  
- TOP VIEW -



UPC358G2 (NEC) FLAT PACKAGE  
DUAL OPERATIONAL AMPLIFIERS  
- TOP VIEW -

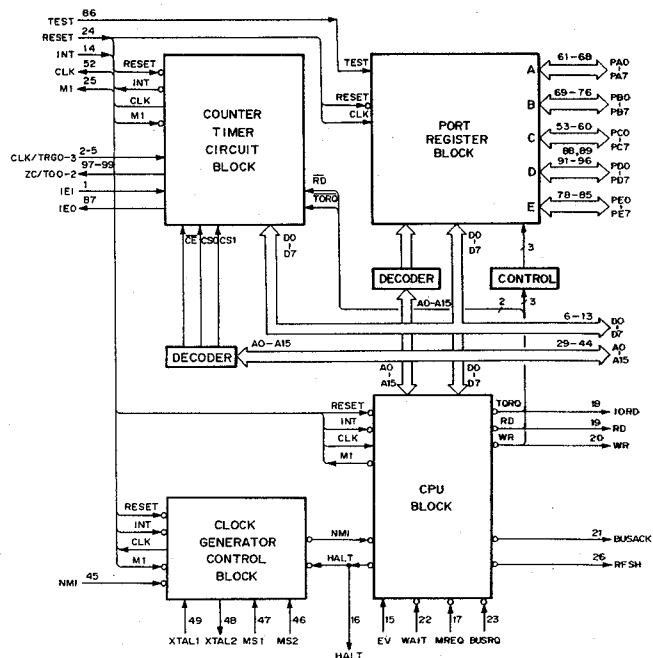


TMPZ84C011BF-6 (TOTHIBA)  
C-MOS 8 BIT MICROPROCESSOR  
- TOP VIEW -

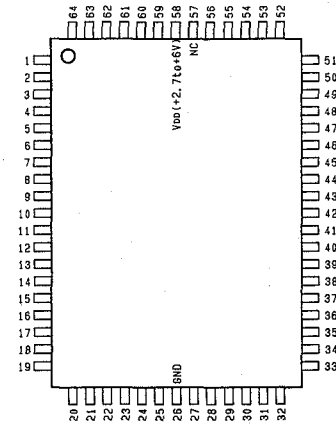


| NO. | IN | OUT | SYMBOL   | NO. | IN | OUT | SYMBOL |
|-----|----|-----|----------|-----|----|-----|--------|
| 1   |    |     | IE1      | 51  |    |     | Vcc    |
| 2   |    |     | CLK/TRG3 | 52  |    |     | CLK    |
| 3   |    |     | CLK/TRG2 | 53  |    |     | PC7    |
| 4   |    |     | CLK/TRG1 | 54  |    |     | PC6    |
| 5   |    |     | CLK/TRG0 | 55  |    |     | PC5    |
| 6   |    |     | D7       | 56  |    |     | PC4    |
| 7   |    |     | D6       | 57  |    |     | PC3    |
| 8   |    |     | D5       | 58  |    |     | PC2    |
| 9   |    |     | D4       | 59  |    |     | PC1    |
| 10  |    |     | D3       | 60  |    |     | PC0    |
| 11  |    |     | D2       | 61  |    |     | PA7    |
| 12  |    |     | D1       | 62  |    |     | PA6    |
| 13  |    |     | D0       | 63  |    |     | PA5    |
| 14  |    |     | INT      | 64  |    |     | PA4    |
| 15  |    |     | EV       | 65  |    |     | PA3    |
| 16  |    |     | HALT     | 66  |    |     | PA2    |
| 17  |    |     | MREQ     | 67  |    |     | PA1    |
| 18  |    |     | IORQ     | 68  |    |     | PA0    |
| 19  |    |     | RD       | 69  |    |     | PB7    |
| 20  |    |     | WR       | 70  |    |     | PB6    |
| 21  |    |     | BUSACK   | 71  |    |     | PB5    |
| 22  |    |     | WAIT     | 72  |    |     | PB4    |
| 23  |    |     | BUSREQ   | 73  |    |     | PB3    |
| 24  |    |     | RESET    | 74  |    |     | PB2    |
| 25  |    |     | M1       | 75  |    |     | PB1    |
| 26  |    |     | RFSH     | 76  |    |     | PB0    |
| 27  |    |     | Vcc      | 77  |    |     | Vss    |
| 28  |    |     | Vss      | 78  |    |     | PE7    |
| 29  |    |     | A0       | 79  |    |     | PE6    |
| 30  |    |     | A1       | 80  |    |     | PE5    |
| 31  |    |     | A2       | 81  |    |     | PE4    |
| 32  |    |     | A3       | 82  |    |     | PE3    |
| 33  |    |     | A4       | 83  |    |     | PE2    |
| 34  |    |     | A5       | 84  |    |     | PE1    |
| 35  |    |     | A6       | 85  |    |     | PE0    |
| 36  |    |     | A7       | 86  |    |     | TEST   |
| 37  |    |     | A8       | 87  |    |     | PD7    |
| 38  |    |     | A9       | 88  |    |     | PD6    |
| 39  |    |     | A10      | 89  |    |     | PD5    |
| 40  |    |     | A11      | 90  |    |     | Vcc    |
| 41  |    |     | A12      | 91  |    |     | PD4    |
| 42  |    |     | A13      | 92  |    |     | PD3    |
| 43  |    |     | A14      | 93  |    |     | PD2    |
| 44  |    |     | A15      | 94  |    |     | PD1    |
| 45  |    |     | NMI      | 95  |    |     | PD0    |
| 46  |    |     | MS2      | 96  |    |     | ZC/TO2 |
| 47  |    |     | MS1      | 97  |    |     | ZC/TO1 |
| 48  |    |     | XTAL2    | 98  |    |     | ZC/TO0 |
| 49  |    |     | XTAL1    | 99  |    |     | Vss    |
| 50  |    |     | Vss      | 100 |    |     | Vss    |

|    |     |     |     |            |  |
|----|-----|-----|-----|------------|--|
| 58 | PA0 | A0  | 29  | AO-A15     | 3-STATE ADDRESS BUS OUTPUTS              |
| 57 | PA1 | A1  | 30  | BUSACK     | BUS ACKNOWLEDGE OUTPUT                   |
| 56 | PA2 | A2  | 31  | BUSREQ     | BUS REQUEST INPUT                        |
| 55 | PA3 | A3  | 32  | CLK        | CLOCK OUTPUT                             |
| 54 | PA4 | A4  | 33  | CLK/TRG0-3 | EXTERNAL CLOCK / TIMER TRIGGER0-3 INPUTS |
| 53 | PA5 | A5  | 34  | DO-D7      | 3-STATE DATA BUS INPUTS/OUTPUTS          |
| 52 | PA6 | A6  | 35  | EV         | EVALUATOR INPUT                          |
| 51 | PA7 | A7  | 36  | HALT       | HALT OUTPUT                              |
| 50 | PB0 | A8  | 37  | IE1/IE0    | CTC INTERRUPT ENABLE INPUT/OUTPUT        |
| 49 | PB1 | A9  | 38  | INT        | MASKABLE INTERRUPT REQUEST INPUT         |
| 48 | PB2 | A10 | 39  | IORQ       | 3-STATE I/O REQUEST OUTPUT               |
| 47 | PB3 | A11 | 40  | M1         | 3-STATE MACHINE CYCLE 1 OUTPUT           |
| 46 | PB4 | A12 | 41  | MREQ       | 3-STATE REQUEST OUTPUT                   |
| 45 | PB5 | A13 | 42  | MS1/MS2    | MODE SELECT 1/2 INPUTS                   |
| 44 | PB6 | A14 | 43  | NMI        | NON-MASKABLE INTERRUPT REQUEST INPUT     |
| 43 | PB7 | A15 | 44  | PA0-PA7    | 3-STATE I/O PORT                         |
| 42 | PC0 | DO  | 45  | PB0-PB7    |  |
| 41 | PC1 | D1  | 46  | PC0-PC7    |  |
| 40 | PC2 | D2  | 47  | PDO-PD7    |  |
| 39 | PC3 | D3  | 48  | PE0-PE7    | 3-STATE READ OUTPUT                      |
| 38 | PC4 | D4  | 49  | RD         |  |
| 37 | PC5 | D5  | 50  | RESET      |  |
| 36 | PC6 | D6  | 51  | RFSH       |  |
| 35 | PC7 | D7  | 52  | TEST       | TEST INPUT                               |
| 34 | PD0 | DO  | 53  | WAIT       | WAIT REQUEST INPUT                       |
| 33 | PD1 | D1  | 54  | WR         | 3-STATE WRITE OUTPUT                     |
| 32 | PD2 | D2  | 55  | ZC/TO0-2   | ZERO COUNT/TIME OUT 0-2 OUTPUTS          |
| 31 | PD3 | D3  | 56  |            |  |
| 30 | PD4 | D4  | 57  |            |  |
| 29 | PD5 | D5  | 58  |            |  |
| 28 | PD6 | D6  | 59  |            |  |
| 27 | PD7 | D7  | 60  |            |  |
| 26 | PE0 | DO  | 61  |            |  |
| 25 | PE1 | D1  | 62  |            |  |
| 24 | PE2 | D2  | 63  |            |  |
| 23 | PE3 | D3  | 64  |            |  |
| 22 | PE4 | D4  | 65  |            |  |
| 21 | PE5 | D5  | 66  |            |  |
| 20 | PE6 | D6  | 67  |            |  |
| 19 | PE7 | D7  | 68  |            |  |
| 18 | PD0 | DO  | 69  |            |  |
| 17 | PD1 | D1  | 70  |            |  |
| 16 | PD2 | D2  | 71  |            |  |
| 15 | PD3 | D3  | 72  |            |  |
| 14 | PD4 | D4  | 73  |            |  |
| 13 | PD5 | D5  | 74  |            |  |
| 12 | PD6 | D6  | 75  |            |  |
| 11 | PD7 | D7  | 76  |            |  |
| 10 | PE0 | DO  | 77  |            |  |
| 9  | PE1 | D1  | 78  |            |  |
| 8  | PE2 | D2  | 79  |            |  |
| 7  | PE3 | D3  | 80  |            |  |
| 6  | PE4 | D4  | 81  |            |  |
| 5  | PE5 | D5  | 82  |            |  |
| 4  | PE6 | D6  | 83  |            |  |
| 3  | PE7 | D7  | 84  |            |  |
| 2  | PD0 | DO  | 85  |            |  |
| 1  | PD1 | D1  | 86  |            |  |
| 0  | PD2 | D2  | 87  |            |  |
|    | PD3 | D3  | 88  |            |  |
|    | PD4 | D4  | 89  |            |  |
|    | PD5 | D5  | 90  |            |  |
|    | PD6 | D6  | 91  |            |  |
|    | PD7 | D7  | 92  |            |  |
|    | PE0 | DO  | 93  |            |  |
|    | PE1 | D1  | 94  |            |  |
|    | PE2 | D2  | 95  |            |  |
|    | PE3 | D3  | 96  |            |  |
|    | PE4 | D4  | 97  |            |  |
|    | PE5 | D5  | 98  |            |  |
|    | PE6 | D6  | 99  |            |  |
|    | PE7 | D7  | 100 |            |  |



UPD75106G (NEC)  
 UPD75108G (NEC)  
 C-MOS 1 CHIP 4-BIT MICROCOMPUTER  
 - TOP VIEW -

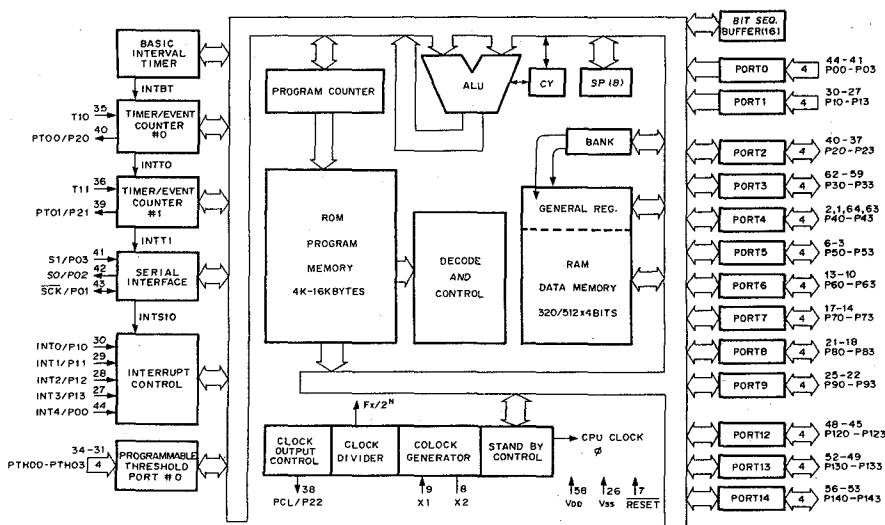


$V_{DD} = (+2.7 \text{ to } +6V)$

| Pin No | I/O | SIGNAL | Pin No | I/O | SIGNAL   | Pin No | I/O | SIGNAL   | Pin No | I/O | SIGNAL |
|--------|-----|--------|--------|-----|----------|--------|-----|----------|--------|-----|--------|
| 1      | I/O | P41    | 17     | I/O | P70      | 33     | I   | PTH01    | 49     | I/O | P133   |
| 2      | I/O | P40    | 18     | I/O | P69      | 34     | I   | PTH00    | 50     | I/O | P132   |
| 3      | I/O | P53    | 19     | I/O | P82      | 35     | I   | T10      | 51     | I/O | P131   |
| 4      | I/O | P52    | 20     | I/O | P81      | 36     | I   | T11      | 52     | I/O | P130   |
| 5      | I/O | P51    | 21     | I/O | P80      | 37     | I/O | P23      | 53     | I/O | P143   |
| 6      | I/O | P50    | 22     | I/O | P93      | 38     | I/O | P22/PCL  | 54     | I/O | P142   |
| 7      | I   | RESET  | 23     | I/O | P92      | 39     | I/O | P21/PT01 | 55     | I/O | P141   |
| 8      | I   | X2     | 24     | I/O | P91      | 40     | I/O | P20/PT00 | 56     | I/O | P140   |
| 9      | I   | X1     | 25     | I/O | P90      | 41     | I   | P03/S1   | 57     | -   | NC     |
| 10     | I/O | P63    | 26     | -   | GND      | 42     | I/O | P02/S0   | 58     | -   | VDD    |
| 11     | I/O | P62    | 27     | I   | P13/INT3 | 43     | I/O | P01/SCK  | 59     | I/O | P33    |
| 12     | I/O | P61    | 28     | I   | P12/INT2 | 44     | I   | P00/INT4 | 60     | I/O | P32    |
| 13     | I/O | P60    | 29     | I   | P11/INT1 | 45     | I/O | P123     | 61     | I/O | P31    |
| 14     | I/O | P73    | 30     | I   | P10/INT0 | 46     | I/O | P122     | 62     | I/O | P30    |
| 15     | I/O | P72    | 31     | I   | PTH03    | 47     | I/O | P121     | 63     | I/O | P43    |
| 16     | I/O | P71    | 32     | I   | PTH02    | 48     | I/O | P120     | 64     | I/O | P42    |

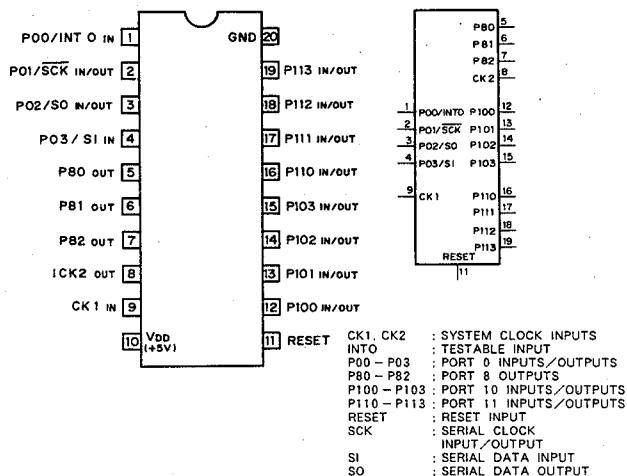
| Pin No | I/O | SIGNAL   | Pin No | I/O | SIGNAL |
|--------|-----|----------|--------|-----|--------|
| 44     | I/O | P00/INT4 | 5      | I/O | P50    |
| 43     | I/O | P01/SCK  | 6      | I/O | P51    |
| 42     | I/O | P02/S0   | 7      | I/O | P52    |
| 41     | I/O | P03/S1   | 8      | I/O | P53    |
| 30     | I/O | P10/INT0 | 13     | I/O | P60    |
| 29     | I/O | P11/INT1 | 12     | I/O | P61    |
| 28     | I/O | P12/INT2 | 11     | I/O | P62    |
| 27     | I/O | P13/INT3 | 10     | I/O | P63    |
| 40     | I/O | P20/PT00 | 17     | I/O | P70    |
| 39     | I/O | P21/PT01 | 16     | I/O | P71    |
| 38     | I/O | P22/PCL  | 15     | I/O | P72    |
| 37     | I/O | P23      | 14     | I/O | P73    |
| 62     | I/O | P30      | 21     | I/O | P80    |
| 61     | I/O | P31      | 20     | I/O | P81    |
| 60     | I/O | P32      | 19     | I/O | P82    |
| 59     | I/O | P33      | 18     | I/O | P83    |
| 4      | I/O | P40      | 28     | I/O | P90    |
| 3      | I/O | P41      | 27     | I/O | P91    |
| 54     | I/O | P42      | 26     | I/O | P92    |
| 53     | I/O | P43      | 25     | I/O | P93    |
| 34     | I/O | PTH00    | 48     | I/O | P120   |
| 33     | I/O | PTH01    | 47     | I/O | P121   |
| 32     | I/O | PTH02    | 46     | I/O | P122   |
| 31     | I/O | PTH03    | 45     | I/O | P123   |
| 35     | I/O | T10      | 52     | I/O | P130   |
| 36     | I/O | T11      | 51     | I/O | P131   |
| 7      | I/O | RESET    | 50     | I/O | P140   |
| 9      | I/O | X1       | 56     | I/O | P143   |
| 8      | I/O | X2       | 55     | I/O | P142   |

INT0 - INT4 : INTERRUPT INPUTS  
 P00 - P03 : 4-BIT INPUT PORT (PORT0)  
 P10 - P13 : 4-BIT INPUT PORT (PORT1)  
 P20 - P23 : 4-BIT I/O PORT (PORT2)  
 P30 - P33 : 4-BIT I/O PORT (PORT3), PROGRAMMABLE  
 P40 - P43 : 4-BIT I/O PORT (PORT4)  
 P50 - P53 : 4-BIT I/O PORT (PORT5)  
 P60 - P63 : 4-BIT I/O PORT (PORT6), PROGRAMMABLE  
 P70 - P73 : 4-BIT I/O PORT (PORT7)  
 P80 - P83 : 4-BIT I/O PORT (PORT8)  
 P90 - P93 : 4-BIT I/O PORT (PORT9)  
 P120 - P123 : 4-BIT I/O PORT (PORT12), OPEN DRAIN  
 P130 - P133 : 4-BIT I/O PORT (PORT13), OPEN DRAIN  
 P140 - P143 : 4-BIT I/O PORT (PORT14), OPEN DRAIN  
 PCL : CLOCK OUTPUT, PROGRAMMABLE  
 PTH00 - PTH03 : THRESHOLD 4-BIT ANALOG INPUT PORT, PROGRAMMABLE  
 PT00 : TIMER/ EVENT COUNTER OUTPUT (CH-1)  
 PT01 : TIMER/ EVENT COUNTER OUTPUT (CH-2)  
 RESET : SYSTEM RESET INPUT  
 S1 : SERIAL INTERFACE DATA INPUT  
 S0 : SERIAL INTERFACE DATA OUTPUT  
 SCK : SERIAL INTERFACE CLOCK INPUT/OUTPUT  
 T10 : TIMER/ EVENT COUNTER CLOCK INPUT (CH-1)  
 T11 : TIMER/ EVENT COUNTER CLOCK INPUT (CH-2)  
 X1, X2 : CONNECTED CRYSTAL FOR SYSTEM CLOCK GENERATE

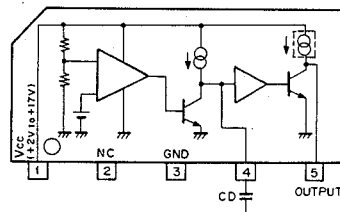




UPD7564CS (NEC)  
C-MOS SINGLE CHIP 4-BIT MICROCOMPUTER  
- TOP VIEW -

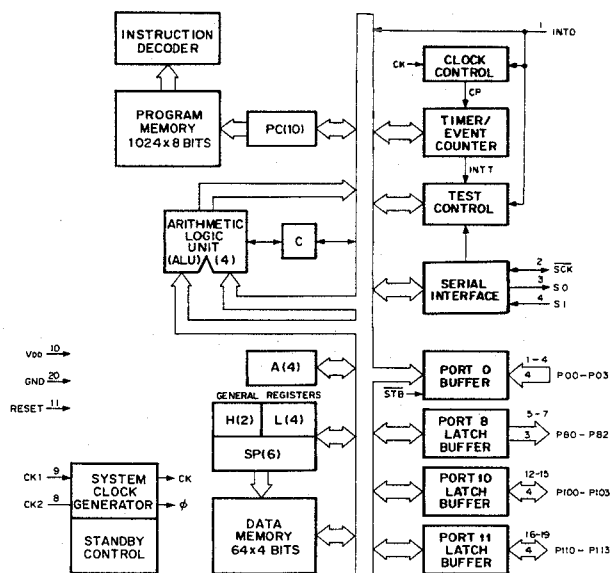
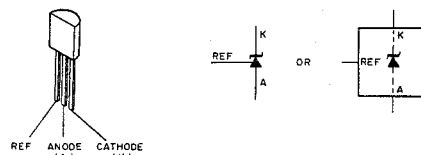


M51953BL (MITSUBISHI)  
POWER RESET  
- SIDE VIEW -

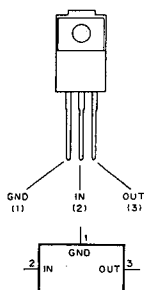


| TYPE     | RESET POLARITY | CIRCUIT             |
|----------|----------------|---------------------|
| M51953AL | LOW            | WITH CURRENT SOURCE |
| M51953BL | LOW            | OPEN COLLECTOR      |
| M51954AL | HIGH           | WITH CURRENT SOURCE |
| M51954BL | HIGH           | OPEN COLLECTOR      |

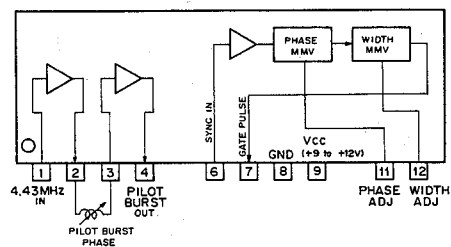
TL431CLP (TI)  
ADJUSTABLE PRECISION SHUNT REGULATOR



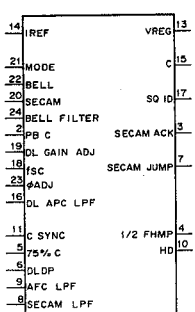
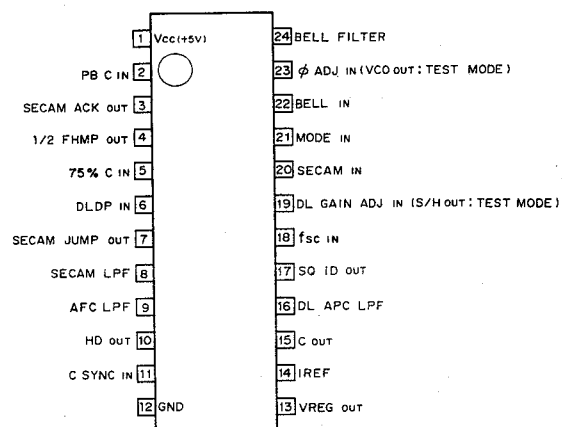
M5F7905L (MITSUBISHI) -5V  
NEGATIVE VOLTAGE REGULATOR (1A)  
- PRINTED SIDE VIEW -



BX1262 (SONY)  
BX1262L (ROHM)  
PILOT BURST INSERTER  
- PRINTED SIDE VIEW -



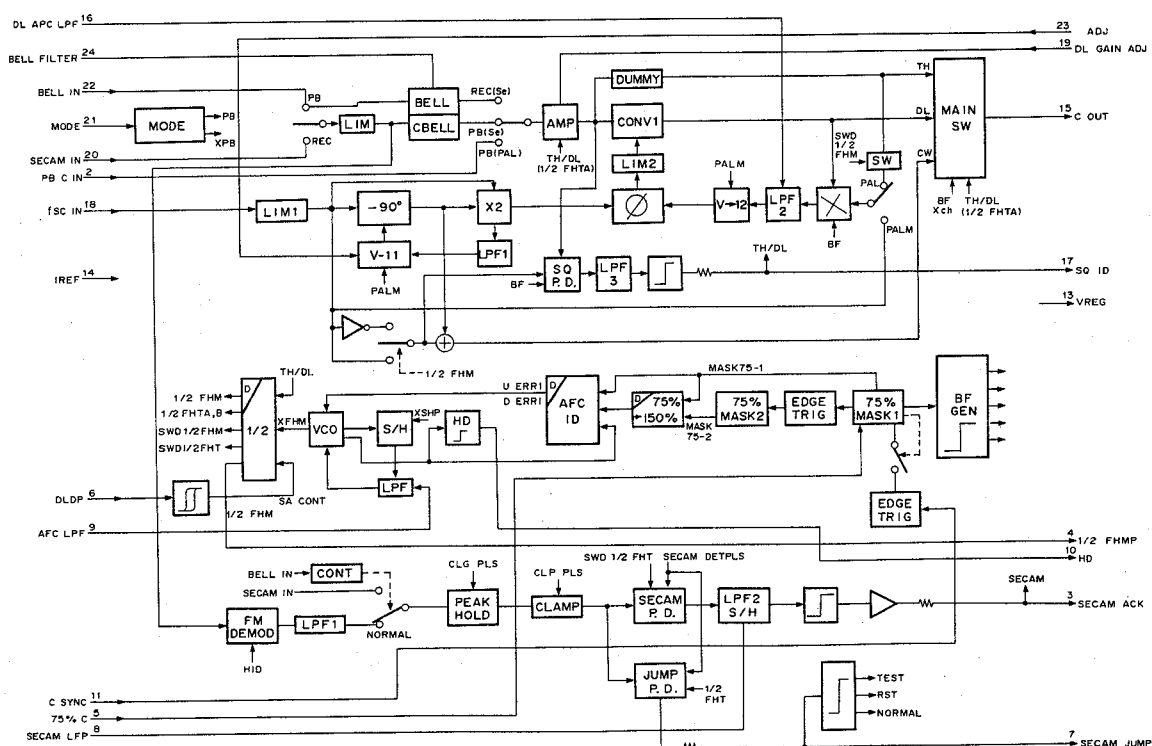
CXA1203N (SONY) FLAT PACKAGE  
COLOR ALIGNMENT CORRECTOR FOR JOG (PAL)  
- TOP VIEW -



**INPUT**  
BELL : SECAM SIGNAL INPUT  
C SYNC : COMPOSITE SYNC  
DLDP : SELECT POLARITY OF 1/2 FIT PULSE  
DL GAIN ADJ : FOR SECAM DETECTOR (TEST MODE: AFC ID OUTPUT)  
fsc : GAIN ADJUST OF DL SIGNAL  
MODE : (TEST MODE: S/H SERQUIT OUTPUT)  
PB C : fsc INPUT  
SECAM : MODE (REC/PB/JOG) SELECT  
75% C : PB CHROMA SIGNAL (PAL)  
Ø ADJ : SECAM DETECTOR  
DL APC LPF : CONNECT CAPACITOR FOR CHARGE DISCHARGE  
C SYNC : DC INPUT FOR BURST PHASE ADJUST  
(TEST MODE: VCO OUTPUT)

**OUTPUT**  
C : PB SIGNAL OUTPUT  
HD : HD PULSE  
SECAM ACK : SECAM DETECTOR  
SECAM JUMP : SELECT POLARITY OF 1/2 FHT PULSE  
SQ ID : SQ DETECTOR  
VREG : REFERENCE VOLTAGE  
1/2 FHMP : 1/2 FREQUENCY DIVIDE PULSE AFC

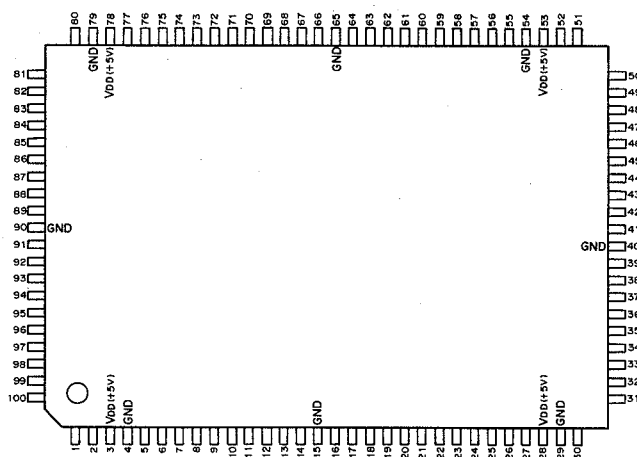
**OTHERS**  
AFC LPF : CONNECT TIME COUNSTANT OF LPF FOR AFC  
BELL FILTER : CONNECT TIME COUNSTANT FOR BELL, BELL FILTER  
DL APC LPF : CONNECT TIME COUNSTANT  
IREF : CONNECT REFERENCE RESISTOR  
SECAM LPF : CONNECT TIME COUNSTANT OF LPF FOR SECAM DETECTOR



CXD8369AQ (FUJITSU)

CMOS PCM AUDIO DATA TIMING CONTROLLER

- TOP VIEW -



(V<sub>DD</sub> = +5 V)

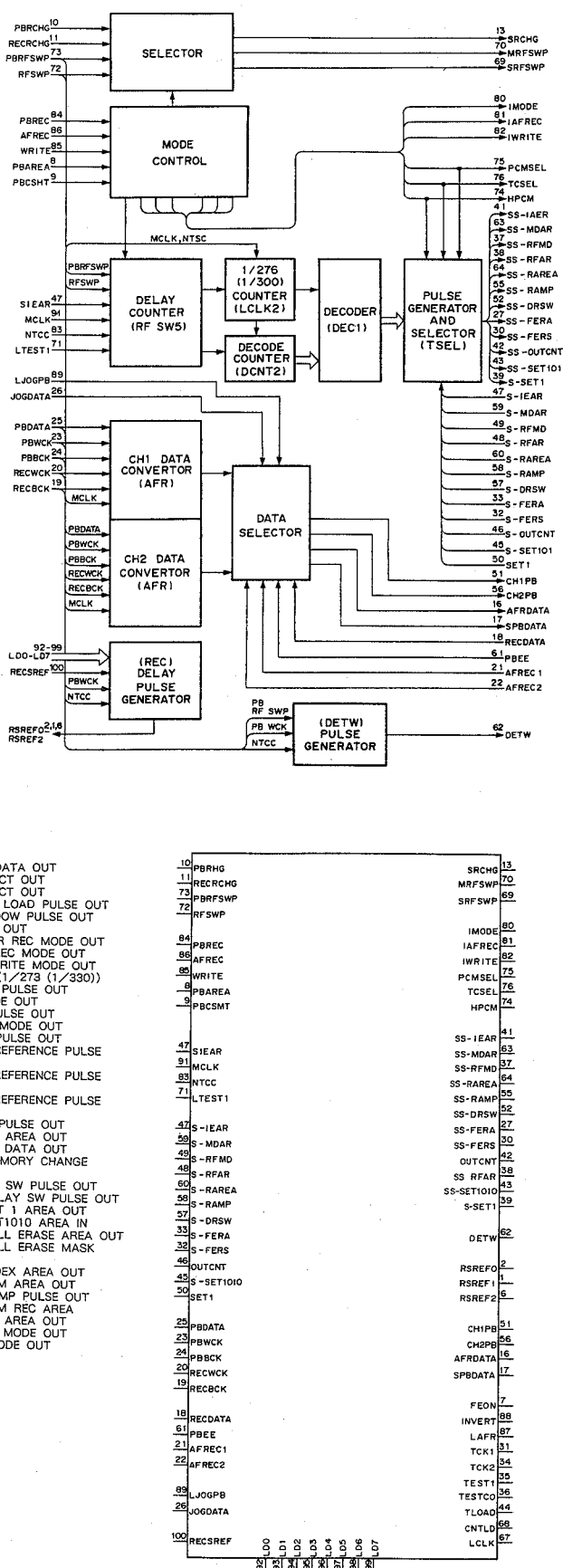
| PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          |
|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|
| 1       | O   | RSREF1          | 26      | I   | JOCDATA         | 51      | O   | CHIPB           | 76      | O   | TCSEL           |
| 2       | O   | RSREF0          | 27      | O   | SSFERA          | 52      | O   | SSDRSW          | 77      | O   | MODE            |
| 3       | -   | V <sub>DD</sub> | 28      | -   | V <sub>DD</sub> | 53      | -   | V <sub>DD</sub> | 78      | -   | V <sub>DD</sub> |
| 4       | -   | GND             | 29      | -   | GND             | 54      | -   | GND             | 79      | -   | GND             |
| 5       | O   | SMFEON          | 30      | O   | SSFERS          | 55      | O   | SSRAM           | 80      | O   | IMODE           |
| 6       | O   | RSREF2          | 31      | I   | TCK1            | 56      | O   | CH2PB           | 81      | O   | IAFREC          |
| 7       | I   | FEON            | 32      | I   | SPERS           | 57      | I   | SDRSW           | 82      | O   | IWRITE          |
| 8       | I   | PBAREA          | 33      | I   | SPERA           | 58      | I   | SRAMP           | 83      | I   | NTCC            |
| 9       | I   | PBCSMT          | 34      | I   | TCK2            | 59      | I   | SMDAR           | 84      | I   | PBREC           |
| 10      | I   | PBRCHG          | 35      | I   | TEST1           | 60      | I   | SRAREA          | 85      | I   | IWRITE          |
| 11      | I   | RECRCHG         | 36      | I   | TESTCO          | 61      | I   | PBEE            | 86      | I   | AFREC           |
| 12      | I   | TRST            | 37      | O   | SSRFMD          | 62      | O   | DETW            | 87      | I   | LAFR            |
| 13      | O   | SRCHG           | 38      | O   | SSRFAR          | 63      | O   | SSMDAR          | 88      | I   | INVERT          |
| 14      | O   | LCLK            | 39      | O   | SSET1           | 64      | O   | SSRAREA         | 89      | I   | LJOBPB          |
| 15      | -   | GND             | 40      | -   | GND             | 65      | -   | GND             | 90      | -   | GND             |
| 16      | O   | AFRDATA         | 41      | O   | SSIEAR          | 66      | O   | RECRFSWP        | 91      | I   | MCLK            |
| 17      | O   | SPBDATA         | 42      | O   | SOUTCNT         | 67      | O   | LCLKST          | 92      | I   | LD00            |
| 18      | I   | RECDATA         | 43      | O   | SSET101         | 68      | O   | CNTLD           | 93      | I   | LD01            |
| 19      | I   | RECBCK          | 44      | I   | TLOAD           | 69      | O   | SRFSWP          | 94      | I   | LD02            |
| 20      | I   | RECWCK          | 45      | I   | SET1010         | 70      | O   | MRFSWP          | 95      | I   | LD03            |
| 21      | I   | AFREC1          | 46      | I   | OUTCNT          | 71      | I   | LTEST1          | 96      | I   | LD04            |
| 22      | I   | AFREC2          | 47      | I   | SIEAR           | 72      | I   | RFSWP           | 97      | I   | LD05            |
| 23      | I   | PBCK            | 48      | I   | SRFAR           | 73      | I   | PBRFSWP         | 98      | I   | LD06            |
| 24      | I   | PBBCK           | 49      | I   | SPFMD           | 74      | O   | HPCM            | 99      | I   | LD07            |
| 25      | I   | PBDATA          | 50      | I   | SET1            | 75      | O   | PCMSEL          | 100     | I   | RECSREF         |

## INPUT

AFREC : AFTER REC MODE IN  
 AFREC1 : AFTER REC MODE 1  
 AFREC2 : AFTER REC MODE 2  
 FEON : FULL ERASE ON MODE IN  
 INVERT : PB/REC INVERT IN  
 JOCDATA : JOG DATA IN  
 LAFR : AFTER RED TEST MODE IN  
 LD00 TO LD07 : RECS REF TO 2 DELAY DATA IN  
 LJOGPB : JOG MODE IN  
 LTEST1 : DELAY TEST MODE IN  
 MCLK : MASTER CLOCK IN  
 NTCC : NTSC/PAL MODE IN  
 OUTCNT : TC AREA IN  
 PBAREA : PB PCM AREA IN  
 PBCK : PB DATA LATCH CLOCK IN  
 PBCSMT : PB PCM ERROR DETECT PULSE IN  
 PB DATA IN  
 PBEE : PB/EE SELECT IN  
 PBRCHG : PB MEMORY CHANGE PULSE IN  
 PBREC : PB/REC MODE IN  
 PBRFSWP : PB RF SW PULSE IN  
 PBWCK : PB DATA CH1/2 CLOCK IN  
 RECDATA : REC DATA LATCH CLOCK IN  
 RECDATA : REC DATA IN  
 RECRCHG : REC MEMORY CHANGE PULSE IN  
 RECSREF : REC SERVO REFERENCE IN  
 RECWCK : REC DATA CH1/2 CLOCK IN  
 RFSWP : RF SW PULSE IN  
 SDRSW : DELAY SW PULSE IN  
 SET1 : SET 1 AREA IN  
 SET1010 : SET1010 AREA IN  
 SFERA : FULL ERASE AREA IN  
 SFERS : FULL ERASE MASK AREA IN  
 SIEAR : INDEX AREA IN  
 SMDAR : PCM AREA IN  
 SRAMP : RAMP PULSE IN  
 SRAREA : PCM REC AREA IN  
 SRFAR : RF AREA IN  
 SRFMD : RF MODE IN  
 TCK1 : TEST CLOCK 1 IN  
 TCK2 : TEST CLOCK 2 IN  
 TESTCO : TEST MODE CARRY IN  
 TEST1 : TEST MODE 1 IN  
 TLOAD : TEST MODE LOAD IN  
 TRST : RESET  
 WRITE : TC WRITE MODE IN

## OUTPUT

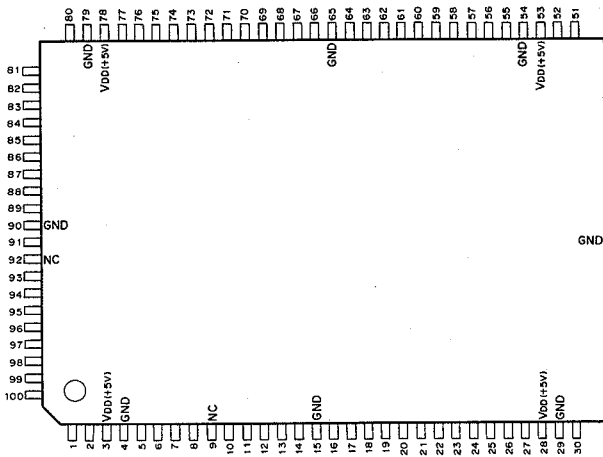
AFRDATA : AFTER REC DATA OUT  
 CHIPB : CH1 PB SELECT OUT  
 CH2PB : CH2 PB SELECT OUT  
 CNTLD : LCLK COUNT LOAD PULSE OUT  
 DETW : DETECT WINDOW PULSE OUT  
 DETW : PCM DETECT OUT  
 HPCM : INSERT AFTER REC MODE OUT  
 IAFREC : INSERT PB/REC MODE OUT  
 IMODE : INSERT TC WRITE MODE OUT  
 IWRITE : LOW CLOCK (1/273 (1/330))  
 LCLK : LCLK START PULSE OUT  
 LCLKST : PB/REC MODE OUT  
 MODE : TC RF SW PULSE OUT  
 MRFSPW : PCM INSERT MODE OUT  
 MRFSWP : REC RF SW PULSE OUT  
 RECRFSWP : REC SERVO REFERENCE PULSE 0 OUT  
 RSREF0 : REC SERVO REFERENCE PULSE 1 OUT  
 RSREF1 : REC SERVO REFERENCE PULSE 2 OUT  
 RSREF2 : REC SERVO REFERENCE PULSE 3 OUT  
 SMFEON : FULL ERASE PULSE OUT  
 SOUTCNT : SELECTED TC AREA OUT  
 SPBDATA : SELECTED PB DATA OUT  
 SRCHG : SELECTED MEMORY CHANGE PULSE OUT  
 SRFSPW : SELECTOR RF SW PULSE OUT  
 SDRSW : SELECTED DELAY SW PULSE OUT  
 SSET1 : SELECTED SET 1 AREA OUT  
 SSET101 : SELECTED SET1010 AREA IN  
 SSFERA : SELECTED FULL ERASE AREA OUT  
 SSFERS : SELECTED FULL ERASE MASK AREA OUT  
 SSIEAR : SELECTED INDEX AREA OUT  
 SSMDAR : SELECTED PCM AREA OUT  
 SSRAMP : SELECTED RAMP PULSE OUT  
 SSRAREA : SELECTED PCM REC AREA  
 SRFAR : SELECTOR RF AREA OUT  
 SSRFMD : SELECTED RF MODE OUT  
 TCSEL : TC INSERT MODE OUT



CXD8370Q (SONY)

C-MOS PCM DATA JOG MODE PROCESSOR

- TOP VIEW -



(V<sub>pp</sub> = +5 V)

| PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          |
|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|
| 1       | O   | FL1             | 36      | I/O | DATA6           | 71      | I   | PBRFSWP         |
| 2       | O   | FL2             | 37      | I/O | DATA7           | 72      | I   | PBAREA          |
| 3       | —   | V <sub>DD</sub> | 38      | I/O | DATA8           | 73      | I   | PBWCK           |
| 4       | —   | GND             | 39      | I/O | DATA9           | 74      | I   | SRSW1           |
| 5       | O   | LJOG            | 40      | —   | GND             | 75      | O   | HSERCH          |
| 6       | O   | LSTOP           | 41      | O   | ADR11           | 76      | O   | LPB             |
| 7       | O   | HNORM           | 42      | O   | ADR10           | 77      | I   | SRSW2           |
| 8       | O   | HJOG            | 43      | O   | ADR9            | 78      | —   | V <sub>DD</sub> |
| 9       | —   | NC              | 44      | O   | ADR8            | 79      | —   | GND             |
| 10      | I   | RESET           | 45      | O   | ADR7            | 80      | O   | SP7             |
| 11      | O   | ERD11           | 46      | O   | ADR6            | 81      | O   | SP6             |
| 12      | O   | ERBD1           | 47      | O   | ADR5            | 82      | O   | SP5             |
| 13      | O   | ERD12           | 48      | O   | ADR4            | 83      | O   | SP4             |
| 14      | O   | ERBD2           | 49      | O   | ADR3            | 84      | O   | SP3             |
| 15      | —   | GND             | 50      | O   | ADR2            | 85      | O   | SP2             |
| 16      | O   | WREN1           | 51      | O   | ADR1            | 86      | O   | SP1             |
| 17      | O   | WREN2           | 52      | O   | V <sub>DD</sub> | 87      | O   | SP0             |
| 18      | I   | TI              | 53      | —   | V <sub>DD</sub> | 88      | O   | FGSP1           |
| 19      | O   | TO              | 54      | —   | GND             | 89      | O   | FGSP2           |
| 20      | I   | TA              | 55      | O   | LOAD0           | 90      | —   | GND             |
| 21      | I   | TB              | 56      | I   | LOAD1           | 91      | I   | MCLK            |
| 22      | I   | ADRSLE          | 57      | O   | SQUT            | 92      | —   | NC              |
| 23      | I   | DTSEL           | 58      | I   | SINP            | 93      | I   | CPFGF           |
| 24      | O   | ADRSLE0         | 59      | I   | UPDN            | 94      | I   | LPFGSL          |
| 25      | O   | SHLD            | 60      | I   | PBBCK           | 95      | I   | LEXJOG          |
| 26      | O   | RDCK            | 61      | I   | PBRCHG          | 96      | I   | IHJOG           |
| 27      | O   | WRCK            | 62      | O   | RDLd            | 97      | I   | HFHSG           |
| 28      | —   | V <sub>DD</sub> | 63      | O   | MEM1R0          | 98      | I   | SDATA           |
| 29      | —   | GND             | 64      | O   | MEM1WR          | 99      | I   | SCLK            |
| 30      | I/O | DATA0           | 65      | —   | GND             | 100     | I   | SCS             |
| 31      | I/O | DATA1           | 66      | O   | MEMWR           | 101     | I   |                 |
| 32      | I/O | DATA2           | 67      | O   | MEM2WR          | 102     | I   |                 |
| 33      | I/O | DATA3           | 68      | O   | MEM2RD          | 103     | I   |                 |
| 34      | I/O | DATA4           | 69      | I   | NTCC            | 104     | I   |                 |
| 35      | I/O | DATA5           | 70      | I   | PBCSMT          | 105     | I   |                 |

```

INPUT
ADDRSEL      : ADDRESS SELECTOR (CONNECTED ADDRSEL0)
CAPPG        CAPSTAN FG
DTSEL        DATA SELECTOR (CONNECTED ADDRSEL0)
HFGSH        TAPE SPEED MODE SELECT
IHJOG        TAPE SPEED MODE SELECT
LEXJOG       TAPE SPEED MODE SELECT
LFGSEL       TAPE SPEED MODE SELECT
LOADI        START POINT OF WRITE DATA
LPB          L : DATA THROUGH
MLC          MASTER CLOCK IN
NTCC         H : NTSC L : PAL
PBAREA       PCM AREA
PBCLK        DATA LATCH CLOCK
PBSCMT       PCM ERRORRATE
PBRCHG       MEMORY SELECT
PBRFSWP      PB SWITCHING PULSE
PBWCK        PCM DATA CLOCK
RESET        L : RESET (NORMALLY OPEN)
SCLK         SERIAL DATA IN FROM SYSTEM CONTROL
SCS          SERIAL DATA IN FROM SYSTEM CONTROL
SDATA        SERIAL DATA IN FROM SYSTEM CONTROL
SINP         PCM PB DATA IN
SR5W         CONNECTS TO HSERCH
SR5W2        CONNECTED TO HJOG
UPDN         TAPE DIRECTION, H : FORWARD L : REVERSE

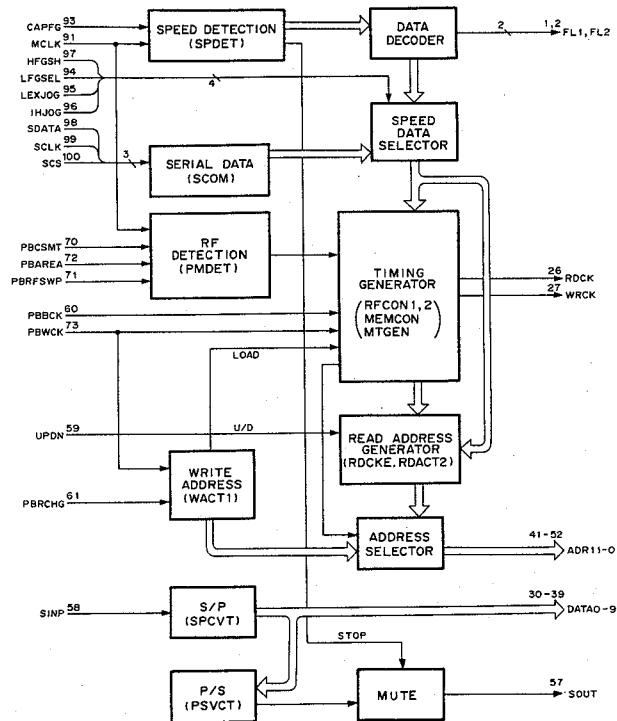
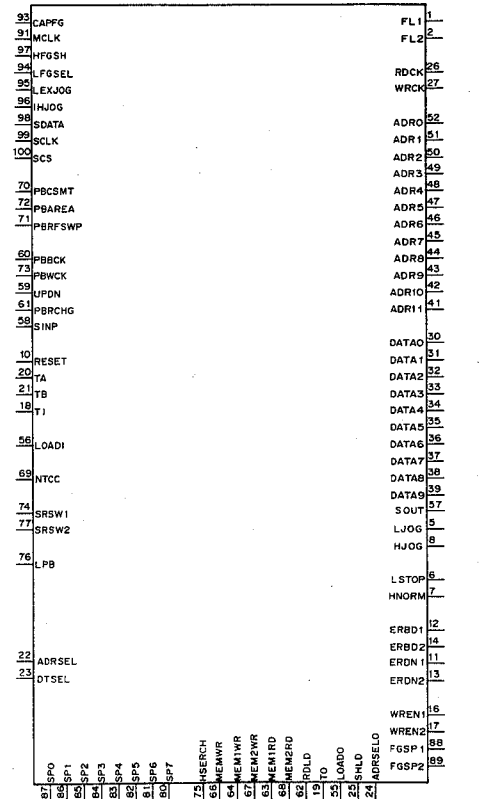
```

```

OUTPUT
ADRSELO      : MEMORY WR/RD SELECT
ADRO - ADR11 : TO MEMORY ADDRESS LINE
FL1, FL2     : LPF ON/OFF, L: ON
HJOG         : H: JOG MODE
HNORM        : H: NORMAL PB
HSERCH       : H: CAPPG IS MORE THAN  $\times 2$  SPEEDS
LJOG        : L: JOG SEARCH MODE
LOATO        : START POINT OF WRITE DATA
LSTOP       : L: STOP
RDCK        : MEMORY READ CLOCK
SOUT        : JOG DATA OUT
WRCK        : MEMORY WRITE CLOCK

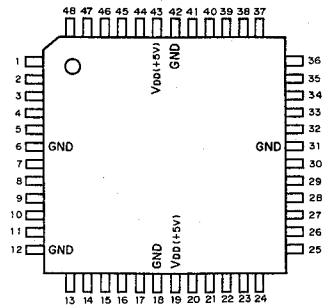
```

**INPUT/OUTPUT**  
DATA0 - DATA9 : TO MEMORY DATA LINE





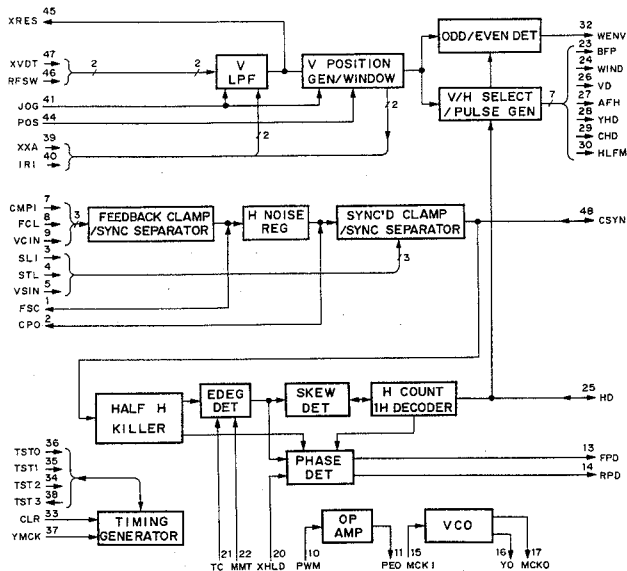
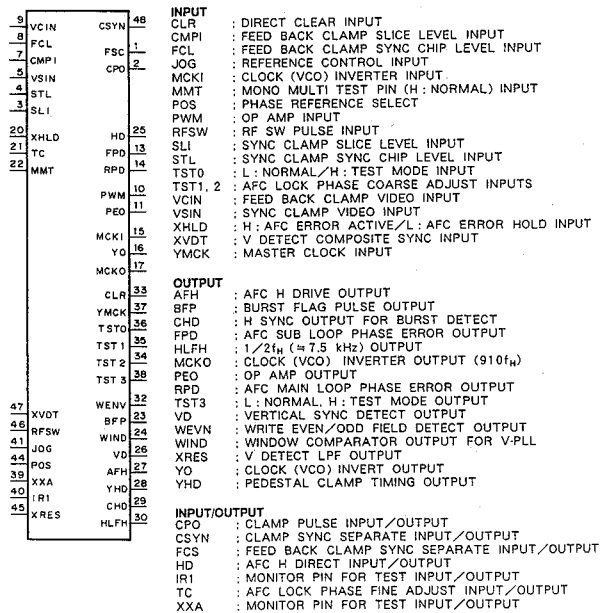
C-MOS AUTOMATIC FREQUENCY CONTROL (AFC) / SYNC SEPARATOR  
- TOP VIEW -



## PIN ASSIGNMENT

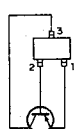
 $(V_{DD} = +5V)$ 

| PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL | PIN NO. | I/O | SYMBOL |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|--------|
| 1       | I/O | FCS    | 13      | O   | FPD    | 25      | O   | HD     | 37      | I   | YMCK   |
| 2       | I/O | CPO    | 14      | O   | RPD    | 26      | O   | VD     | 38      | O   | TS73   |
| 3       | I   | SLI    | 15      | I   | MCKI   | 27      | O   | AFH    | 39      | I/O | XXA    |
| 4       | I   | STL    | 16      | O   | YO     | 28      | O   | YHD    | 40      | I/O | IR1    |
| 5       | I   | VSIN   | 17      | O   | MCKO   | 29      | O   | CHD    | 41      | I   | JOG    |
| 6       | —   | GND    | 18      | —   | GND    | 30      | O   | HLFH   | 42      | —   | GND    |
| 7       | I   | CMPI   | 19      | —   | Vos    | 31      | —   | GND    | 43      | —   | Vos    |
| 8       | I   | FCL    | 20      | I   | XHLD   | 32      | O   | WEVN   | 44      | I   | POS    |
| 9       | I   | VCIN   | 21      | O   | TC     | 33      | I   | CLR    | 45      | O   | XRES   |
| 10      | I   | PWM    | 22      | I   | MMT    | 34      | I   | TS72   | 46      | I   | RFSW   |
| 11      | O   | PEC    | 23      | O   | BFP    | 35      | I   | TS71   | 47      | I   | XVDT   |
| 12      | —   | GND    | 24      | O   | WIND   | 36      | I   | TS70   | 48      | O   | CSYN   |



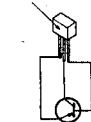


(SCALE 4/1)  
TOP VIEW



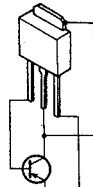
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2SA1162G  
2SA1226  
2SA1576  
2SA1611  
2SA812

TYPE NO.  
PRINTED



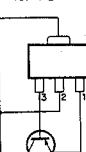
2SA1175

(SCALE 2/1)



2SA1385

(SCALE 4/1)  
TOP VIEW

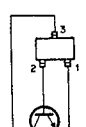


2SB1114  
2SB1121  
2SB1188

2SB841

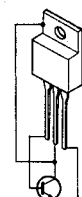


(SCALE 4/1)  
TOP VIEW

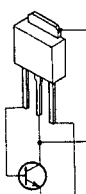


2SC1623  
2SC2223  
2SC2712  
2SC2715Y  
2SC3326N  
2SC4081  
2SC4177  
2SC4178  
2SC4213A

2SC1826

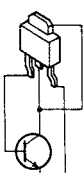


(SCALE 2/1)

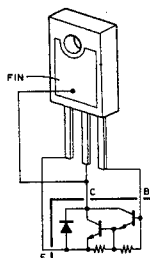


2SC3518

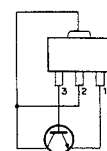
2SD1081



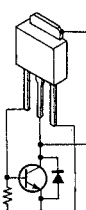
2SD1309



TOP VIEW (SCALE 4/1) 2SD1614

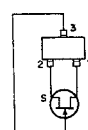


(SCALE 2/1)

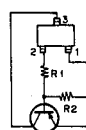


2SD992A

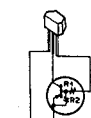
TOP VIEW (SCALE 4/1) 2SK94



TOP VIEW (SCALE 4/1)

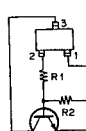


DTA124EU (R1 = 22K, R2 = 22K)  
DTA124XK (R1 = 22K, R2 = 47K)  
DTA144EU (R1 = 47K, R2 = 47K)



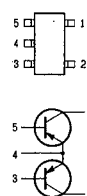
DTA143XS (R1=4.7K, R2=10K)  
DTC114ES (R1=10K, R2=10K)

TOP VIEW (SCALE 4/1)



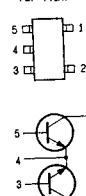
DTC124EU (R1 = 22K, R2 = 22K)  
DTC144EK (R1 = 47K, R2 = 47K)  
DTC144EU (R1 = 47K, R2 = 47K)

(SCALE 6/1)  
TOP VIEW



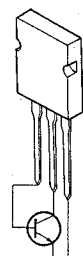
FMS1FE

(SCALE 6/1)  
TOP VIEW



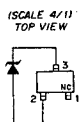
FMW1

2SD2096

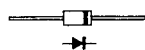




# DIODE



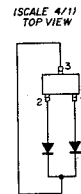
02CZ ? ?  
RD ? ? M



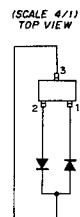
10E-2  
1SS119  
1SS120



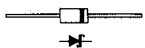
1S2835



1S2837  
DAN202U



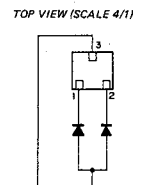
1SS123  
1SS226



1SS99

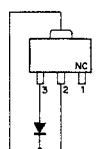


1T32  
1T33C

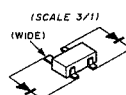


DAP202U

TOP VIEW (SCALE 4/1) E10DS2



FC54M

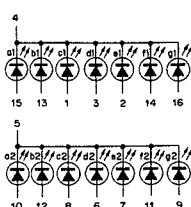
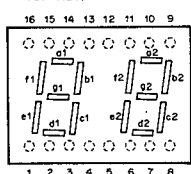


MA159



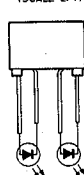
GL-5HDS ; RED

DUAL 7-SEGMENT LED  
— TOP VIEW —

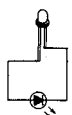


LB402VK (ROHM)

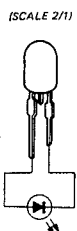
— SIDE VIEW —  
(SCALE 2/1)



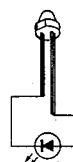
LT-9200H ; YELLOW  
LT-9200N ; YELLOWISH GREEN



TLG124A ; GREEN



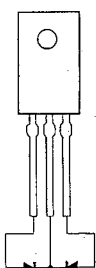
TLG256 ; GREEN  
TLY256 ; YELLOW



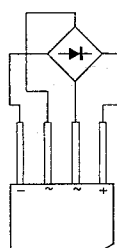
TLUG144 ; GREEN  
TLUY144 ; YELLOW



TLUG154 ; GREEN



D10LC20U  
D10SC4M



D3SB60

(SCALE 4/1)  
TOP VIEW



DAN212K

SECTION 13  
BOARD LAYOUTS AND SCHEMATIC DIAGRAM

CIRCUIT FUNCTION OF THE PRINTED CIRCUIT BOARD

| SYSTEM               | BOARD    | CIRCUIT FUNCTION                            |
|----------------------|----------|---|
| VIDEO                | MD-89    | Y/C REC Video Process                       |
|                      | VRA-4P   | REC AMP/Flying Erase OSC                    |
|                      | PRE-10P  | PB Head AMP (VIDEO, AFM, PCM, ATF), RE, EQ  |
|                      | DM-92    | Y/C PB Video Process                        |
|                      | CR-40    | DG Compensator (LINE)                       |
|                      | CR-41    | DG Compensator (DUB)                        |
|                      | FL-129P  | PB Chroma LPF                               |
|                      | FL-130P  | PB Y LPF (Hi8)                              |
|                      | FL-131P  | PB Y EQ (NORMAL)                            |
|                      | TBC-27   | TBC/GEN Lock                                |
|                      | VA-111AP | Video Interface/Sync, Burst Insert          |
|                      | CP-176   | Video Input/Output Interface                |
| AUDIO                | AU-156AP | AFM Audio, Input/Output Select              |
|                      | VR-122   | Audio Level Control                         |
|                      | AU-157AP | PCM Audio, Input/Output Select              |
|                      | AA-57P   | Audio Input/Output AMP                      |
|                      | PD-62    | JOG Audio Process                           |
|                      | CP-177   | Audio Input/Output Interface                |
| SYSTEM CONTROL SERVO | SST-2AP  | Servo/System Control                        |
|                      | CN-551P  | Servo Interface                             |
|                      | KY-217   | Function Key Board                          |
|                      | DD-12    | Display Drive                               |
|                      | PTC-32   | Search Dial                                 |
|                      | LP-52    | Mode Display                                |
|                      | DP-101   | Display                                     |
|                      | RM-101   | 15Pin Connector (for TBC Remote controller) |
|                      | RM-122   | 9Pin connector                              |
|                      | SW-467P  | Sub Panel Switch                            |
|                      | SW-540   | Mode Select Switch                          |
|                      | SW-543   | Remote Panel Switch                         |
|                      | TS-74    | Tape Top/End Sensor                         |
|                      | RS-31    | Mechanical Control                          |
|                      | MS-36    | Mode Switch                                 |
|                      | LM-22    | Loading Sensor                              |
|                      | LD-1     | Tape Sensor                                 |
|                      | TR-72    | S-Tension Regulator Sensor                  |

| SYSTEM | BOARD     | CIRCUIT FUNCTION          |
|--------|-----------|---------------------------|
| POWER  | AC-121AP  | AC Input                  |
|        | DC-57P    | DC Supply                 |
|        | SOPS-1031 | Switching Regulator       |
| OTHERS | MB-356P   | Mother Board              |
|        | MT-57A    | Audio Level Meter         |
|        | SW-466    | Audio Meter Select Switch |
|        | VR-130    | Headphones Level          |
|        | HP-52     | Headphones Jack           |
|        | FP-84     | Connection                |
|        | FP-122    | Connection                |
|        | FP-206    | Connection                |

In the schematic diagrams, the following marks are described near by reference number. These are parts data at factory.

CAPACITOR (C)

|     |   |              |
|-----|---|--------------|
| AL  | } | ELECTROLYTIC |
| AS  |   |              |
| TA  |   | TANTALUM     |
| CA  | } | CERAMIC      |
| CC  |   |              |
| CCS |   |              |
| CM  |   |              |
| CS  |   |              |
| MPS | } | MYLAR        |
| PP  |   |              |
| PS  |   |              |
| PT  |   |              |
| MD  |   | DIPPED MICA  |
| MS  |   | MICA         |

RESISTOR (R)

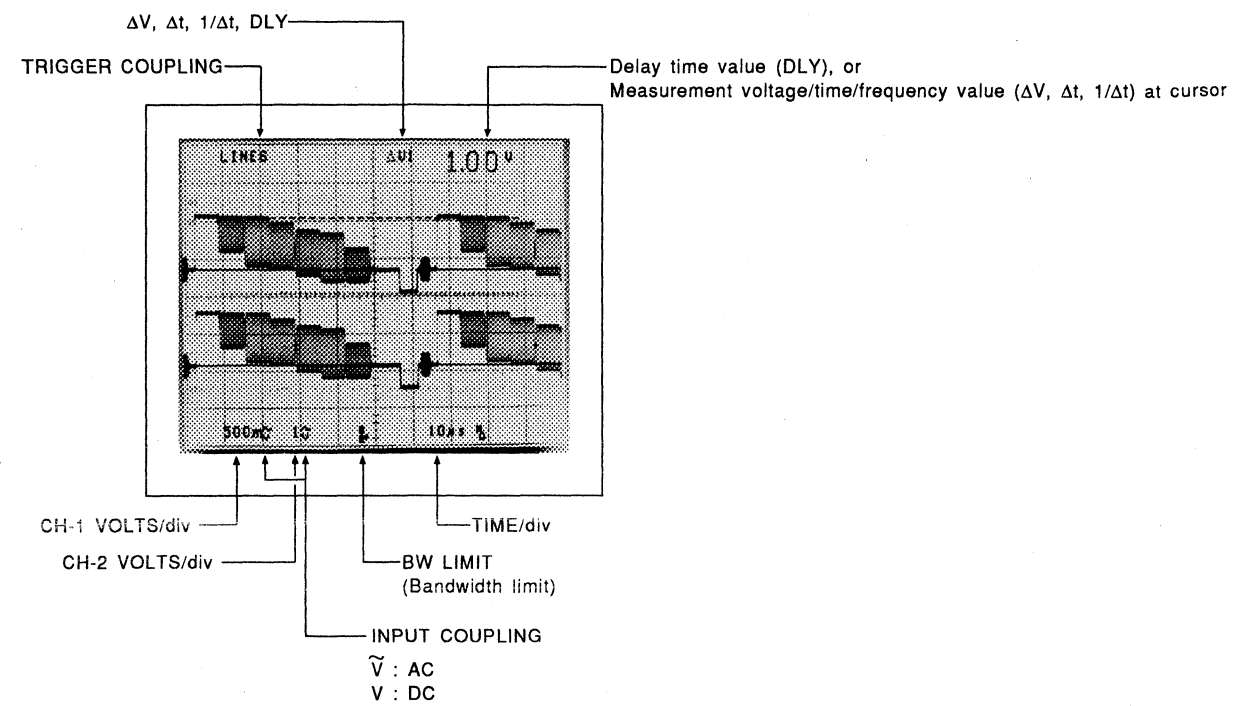
VARIABLE RESISTOR (RV)

|    |   |            |
|----|---|------------|
| RC | } | CARBON     |
| RD |   |            |
| RF |   | FUSE       |
| RN | } | METAL      |
| RS |   |            |
| RW |   | WIERWOUND  |
| NM |   | NO MOUNTED |

- The variety of the fixed resistor without its indication is fixed carbon resistor.

## SETTING OF OSCILLOSCOPE FOR MEASUREMENT

- With waveform photograph used for waveform display :  
The setting conditions are displayed on the photograph as given below.



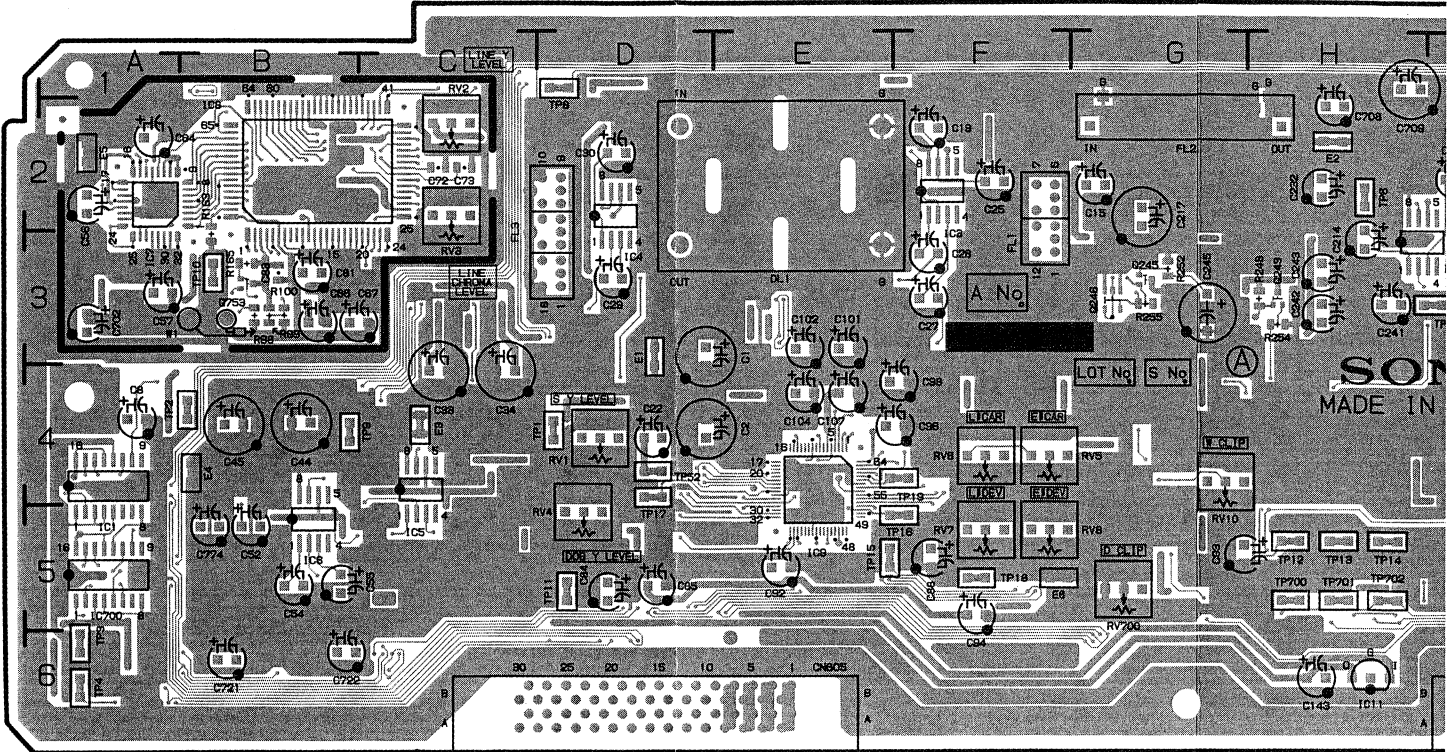
The mentioned items at waveform photograph of this section are measurement point and machine operation mode.

MD-89 (1-647-604-11)

|       |      |      |      |       |      |       |     |
|-------|------|------|------|-------|------|-------|-----|
| CN11  | M-2  | Q24  | B-5* | Q701  | A-3* | TP8   | D-1 |
| CN605 | D-6  | Q25  | B-5* | Q702  | A-3* | TP9   | B-4 |
| CN606 | K-6  | Q26  | B-4* | Q703  | H-2* | TP10  | B-3 |
|       |      | Q27  | B-3* | Q704  | J-2* | TP11  | D-5 |
| D1    | A-6* | Q28  | D-5* | Q705  | D-3* | TP12  | H-5 |
| D3    | H-4* | Q29  | H-5* | Q706  | D-2* | TP13  | H-5 |
| D4    | H-4* | Q30  | H-5* | Q707  | C-5* | TP14  | H-5 |
| D241  | G-3* | Q31  | H-5* | Q708  | C-5* | TP15  | E-5 |
| D700  | G-5* | Q32  | H-5* | Q709  | C-4* | TP16  | F-5 |
| D701  | H-5* | Q33  | H-5* | Q710  | B-5* | TP17  | D-4 |
| D702  | D-5* | Q34  | H-5* | Q711  | G-5* | TP18  | F-5 |
| D703  | D-5* | Q35  | E-5* | Q712  | G-4* | TP19  | F-4 |
| D704  | H-5* | Q36  | F-4* | Q715  | K-5* | TP20  | K-2 |
|       |      | Q37  | F-4* | Q716  | M-6* | TP21  | K-3 |
| DL1   | E-2  | Q38  | F-5* | Q717  | M-5* | TP22  | K-2 |
|       |      | Q39  | K-2* | Q718  | M-5* | TP23  | L-1 |
| E1    | D-3  | Q40  | K-2* | Q719  | M-5* | TP24  | L-3 |
| E2    | H-2  | Q41  | K-2* | Q720  | M-5* | TP29  | K-4 |
| E3    | C-4  | Q42  | K-3* | Q721  | M-4* | TP30  | L-6 |
| E4    | B-4  | Q43  | L-2* | Q723  | M-4  | TP31  | K-5 |
| E5    | A-2  | Q44  | K-2* | Q724  | N-3* | TP32  | L-4 |
| E6    | F-5  | Q45  | M-2  | Q725  | N-3* | TP33  | L-4 |
| E7    | L-3  | Q46  | M-2  | Q727  | N-3* | TP34  | M-3 |
| E9    | N-1  | Q47  | M-2* | Q728  | N-4* | TP35  | L-2 |
|       |      | Q48  | M-2  | Q729  | N-4* | TP36  | M-1 |
| FL1   | F-2  | Q51  | N-2  | Q731  | N-5* | TP37  | M-1 |
| FL2   | G-2  | Q52  | H-5* | Q732  | N-5  | TP38  | M-1 |
| FL3   | D-3  | Q54  | G-5* | Q733  | N-5* | TP51  | K-3 |
| FL4   | K-3  | Q55  | G-4* | Q734  | N-5* | TP52  | D-4 |
| FL5   | K-2  | Q56  | G-4* | Q735  | N-5* | TP53  | K-1 |
|       |      | Q57  | H-4* | Q736  | N-5* | TP700 | H-5 |
| IC1   | A-5  | Q58  | G-4* | Q737  | G-5* | TP701 | H-5 |
| IC2   | H-3  | Q75  | M-6* | Q750  | B-5* | TP702 | H-5 |
| IC3   | F-2  | Q76  | M-6  | Q751  | C-5* | TP703 | M-2 |
| IC4   | D-3  | Q77  | L-4* | Q752  | C-5* |       |     |
| IC5   | C-5  | Q78  | L-4* | Q753  | B-3  | X1    | K-3 |
| IC6   | B-5  | Q79  | K-4* | Q754  | E-5* |       |     |
| IC7   | A-2  | Q80  | L-6* | Q755  | M-4* |       |     |
| IC8   | B-2  | Q81  | L-5* | Q756  | N-3* |       |     |
| IC9   | E-4  | Q82  | L-5* | Q758  | J-4* |       |     |
| IC10  | K-2  | Q83  | L-4* |       |      |       |     |
| IC11  | H-6  | Q84  | K-5* | RV1   | D-4  |       |     |
| IC14  | M-3  | Q85  | L-5* | RV2   | C-2  |       |     |
| IC700 | A-5  | Q86  | L-5* | RV3   | C-2  |       |     |
| IC701 | N-4  | Q87  | L-4* | RV4   | D-5  |       |     |
| IC702 | N-6  | Q88  | L-5* | RV5   | F-4  |       |     |
| IC703 | N-5  | Q89  | L-3* | RV6   | F-4  |       |     |
|       |      | Q90  | L-3* | RV7   | F-5  |       |     |
| Q1    | D-4* | Q91  | G-2* | RV8   | F-5  |       |     |
| Q2    | D-4* | Q92  | K-4* | RV10  | G-4  |       |     |
| Q3    | D-3* | Q93  | A-5* | RV13  | L-4  |       |     |
| Q4    | D-3* | Q94  | G-2* | RV14  | L-4  |       |     |
| Q5    | A-4* | Q95  | H-3* | RV15  | L-5  |       |     |
| Q6    | A-6* | Q241 | H-3* | RV16  | L-4  |       |     |
| Q7    | A-6* | Q242 | H-3* | RV17  | L-5  |       |     |
| Q8    | J-3* | Q243 | G-3  | RV18  | L-2  |       |     |
| Q9    | F-3* | Q244 | G-3* | RV700 | G-5  |       |     |
| Q10   | F-3* | Q245 | G-3  | RV702 | M-4  |       |     |
| Q11   | H-2* | Q246 | G-3  | RV703 | M-5  |       |     |
| Q12   | F-1* | Q501 | H-4* | RV704 | M-4  |       |     |
| Q13   | F-2* | Q503 | J-5* | RV706 | N-3  |       |     |
| Q14   | F-2* | Q504 | J-5* | RV708 | N-3  |       |     |
| Q17   | D-2* | Q505 | J-5* |       |      |       |     |
| Q18   | D-2* | Q506 | J-4* | TP1   | D-4  |       |     |
| Q19   | C-4* | Q507 | J-5* | TP2   | B-4  |       |     |
| Q20   | C-5* | Q508 | K-5* | TP3   | A-6  |       |     |
| Q21   | C-4* | Q509 | J-4* | TP4   | A-6  |       |     |
| Q22   | B-5* | Q510 | K-4* | TP5   | J-3  |       |     |
| Q23   | B-4* | Q700 | A-5* | TP6   | H-2  |       |     |

\* mark ; B SIDE mount

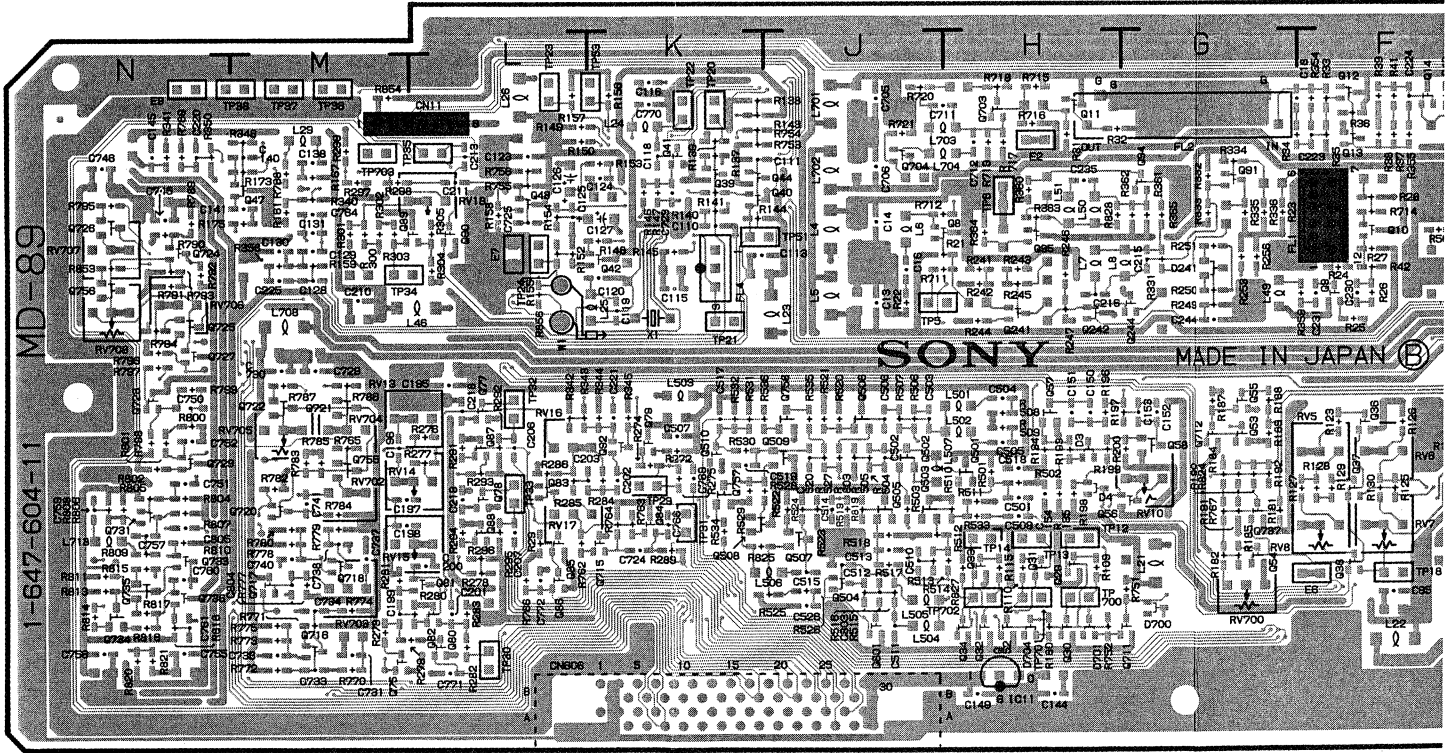
MD-89 BOARD  
A Side



1-647-604-11 A SIDE

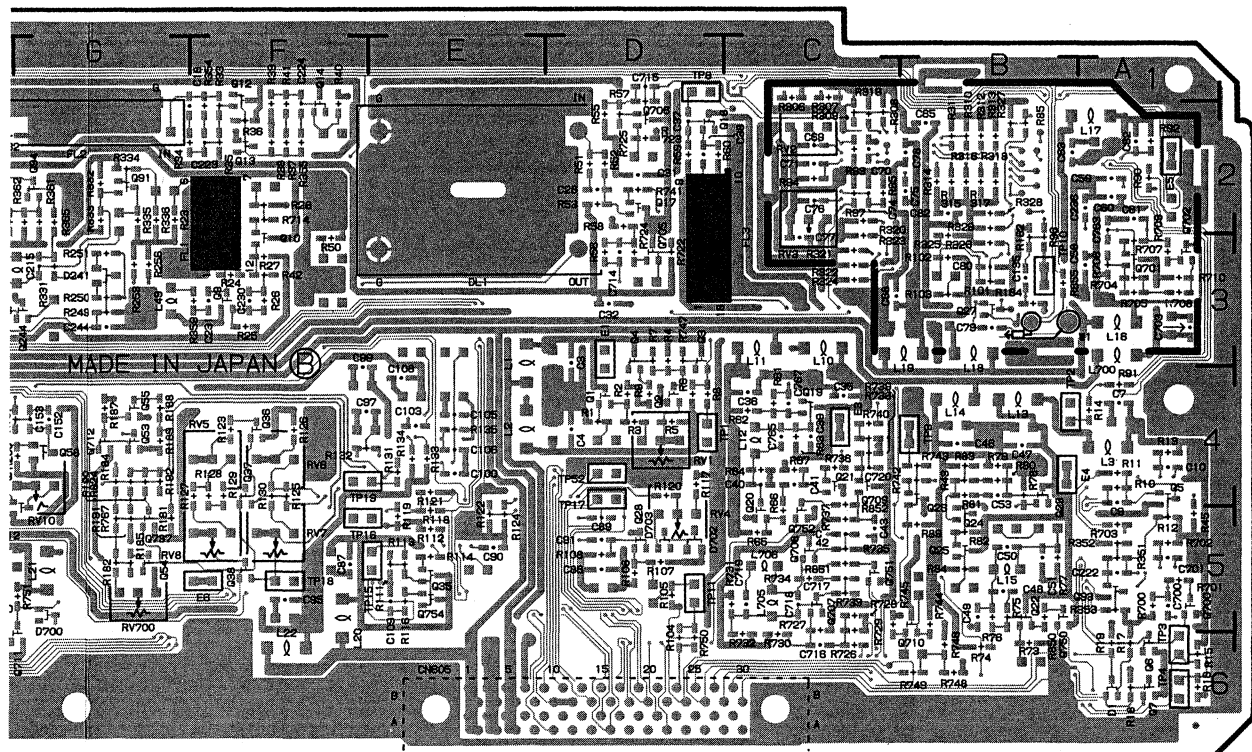
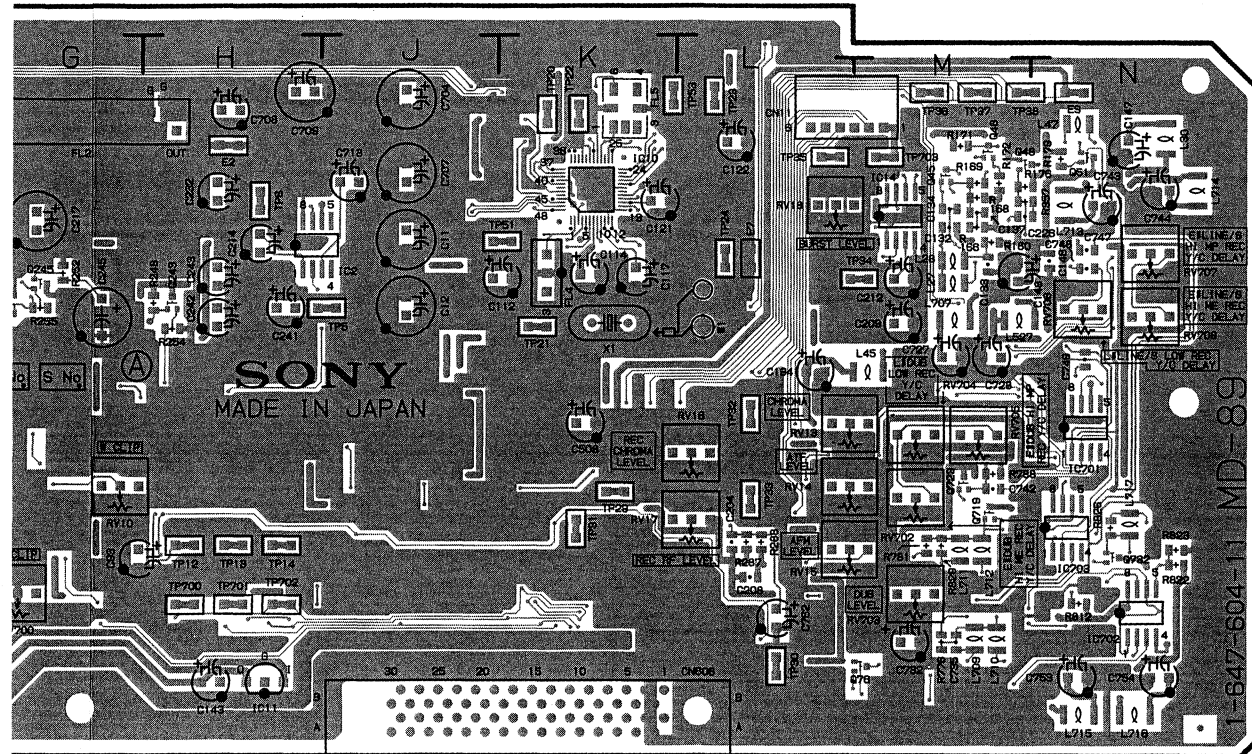
A Side is the same as Component Side

MD-89 BOARD  
B Side

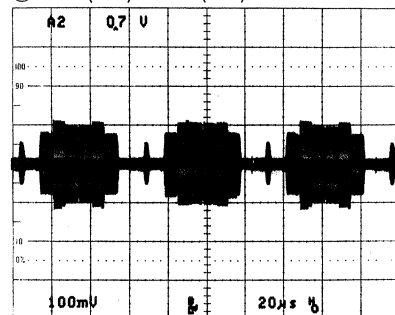
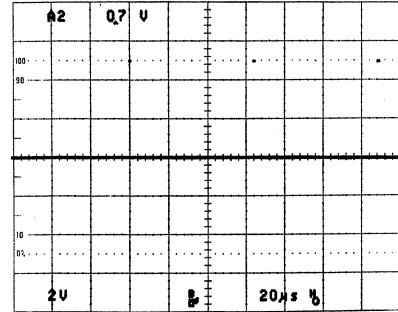


1-647-604-11 B SIDE

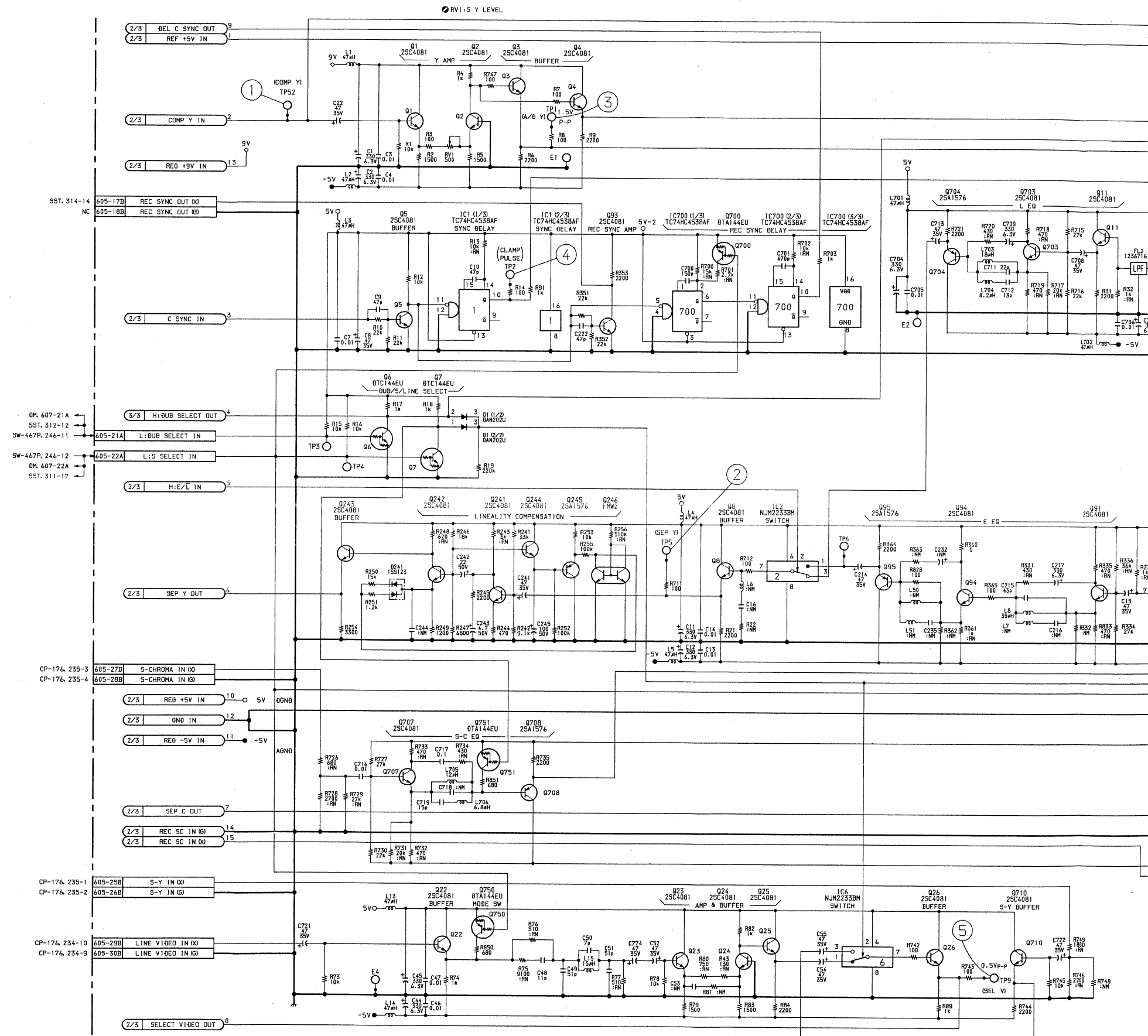
B Side is the same as Soldering Side

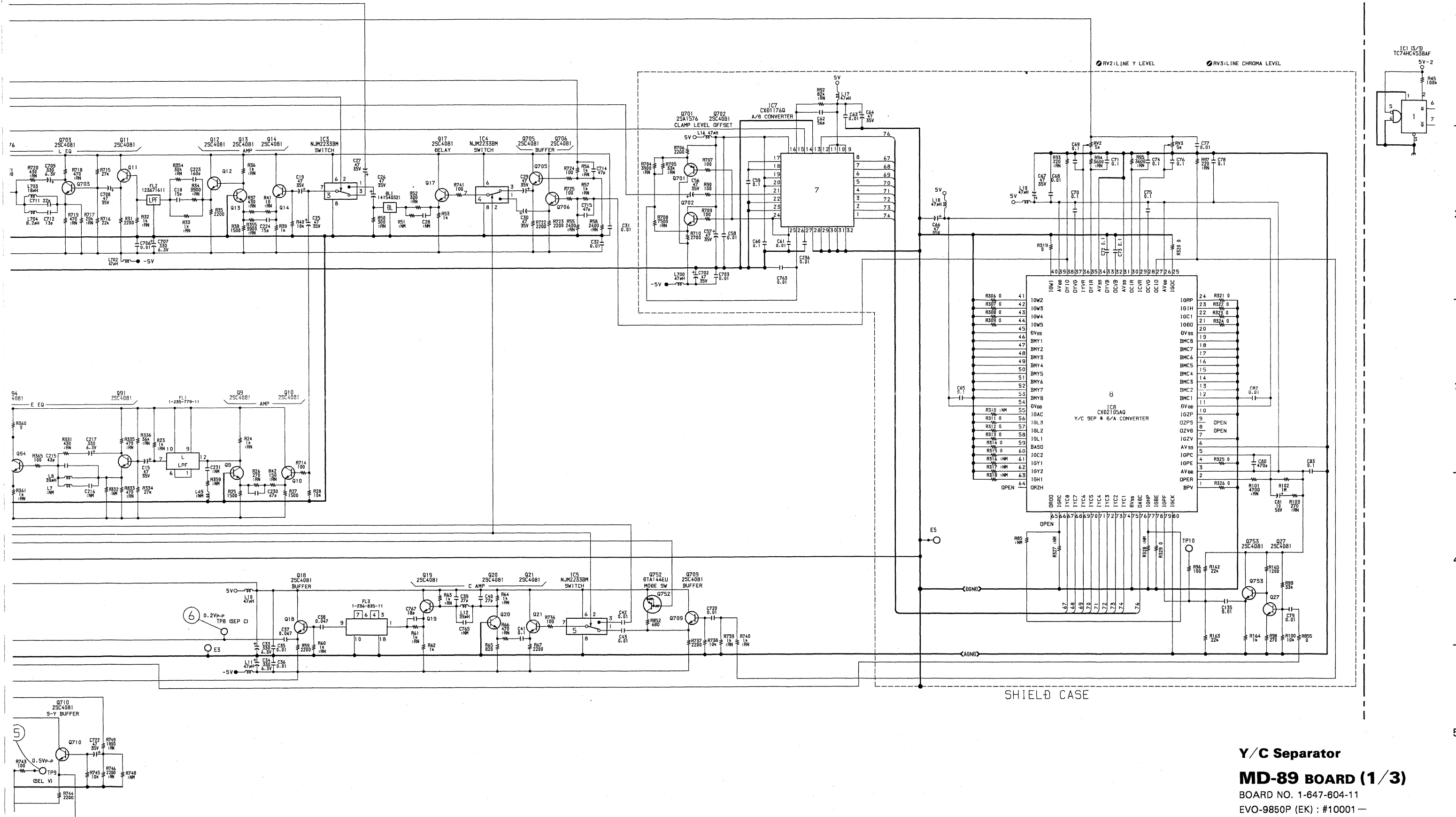




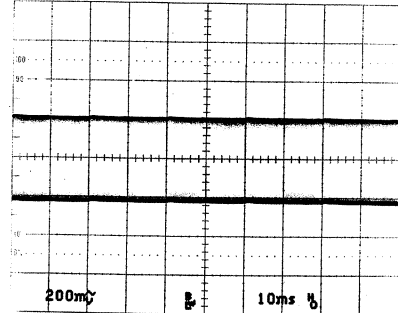


— 0 Vdc

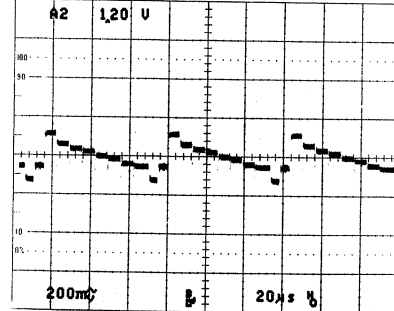




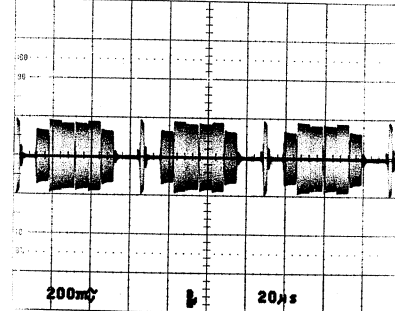
① TP15 (E-5) STOP (E-E) mode



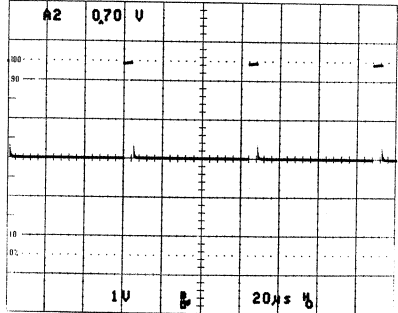
⑤ TP19 (F-4) STOP (E-E) mode



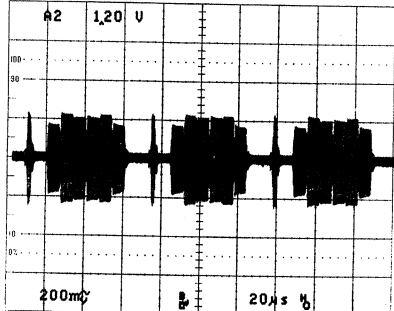
⑨ TP53 (K-1) STOP (E-E) mode



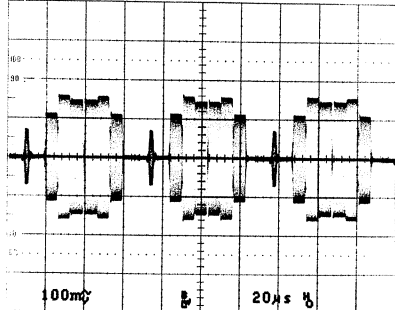
② TP17 (D-4) STOP (E-E) mode



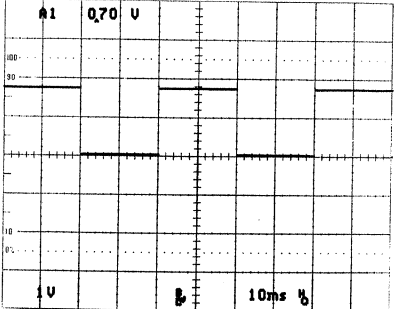
⑥ TP51 (K-3) STOP (E-E) mode



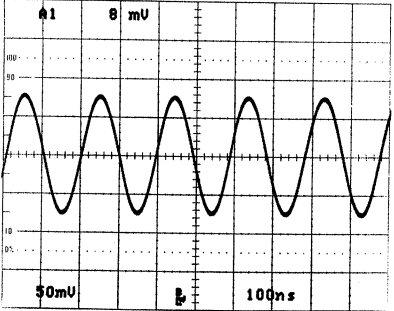
⑩ TP23 (L-1) STOP (E-E) mode



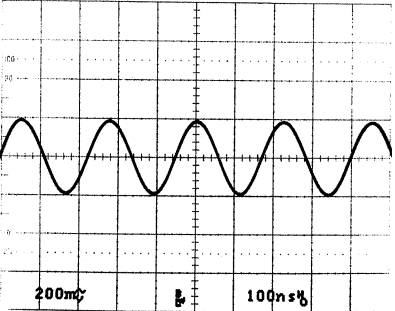
③ TP16 (F-5) STOP (E-E) mode



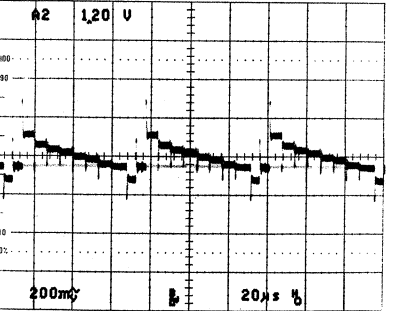
⑦ TP21 (K-3) STOP (E-E) mode



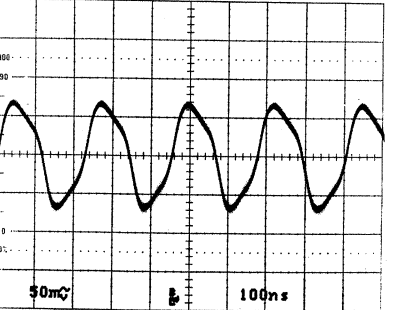
⑪ TP24 (L-3) STOP (E-E) mode



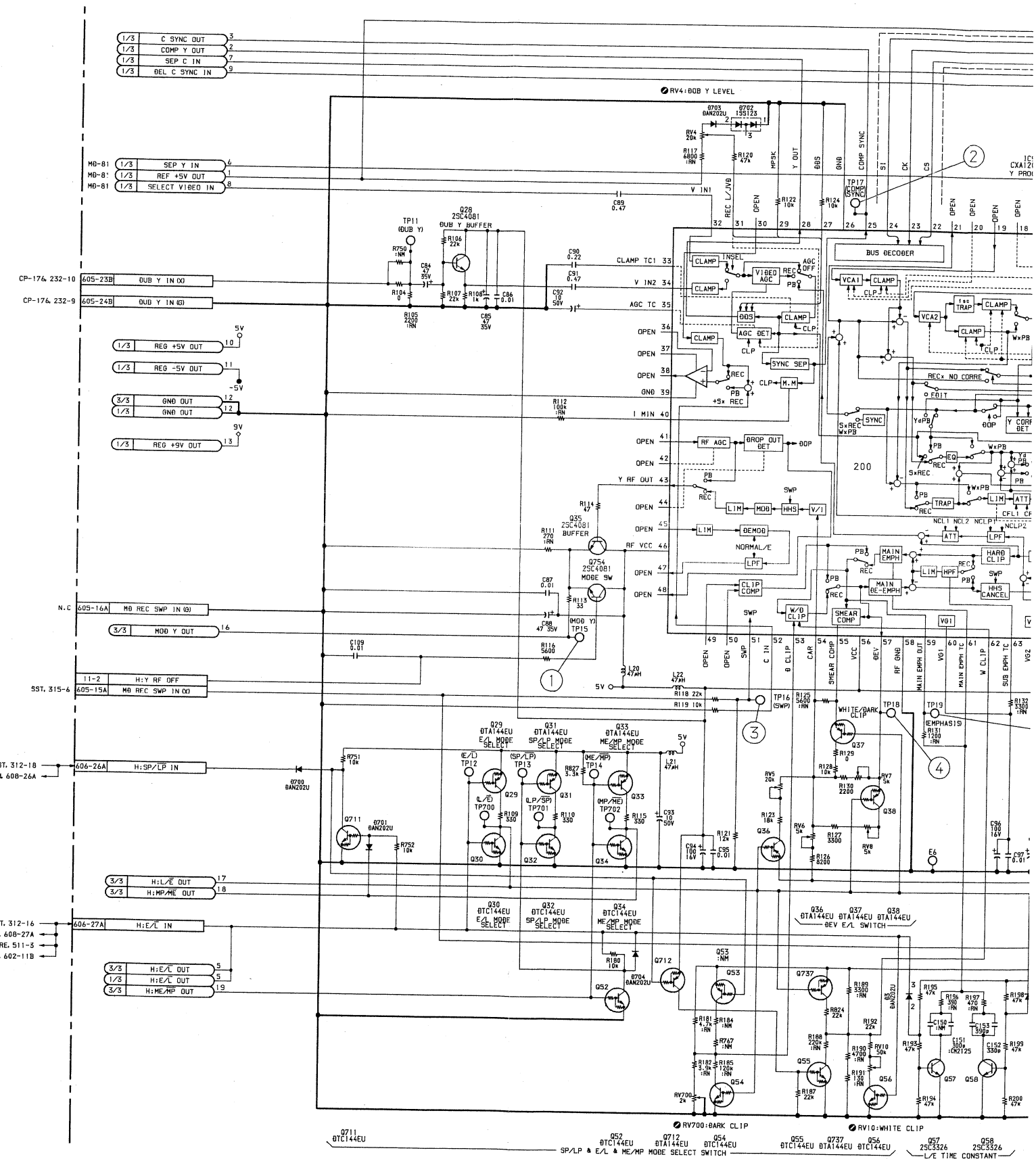
④ TP18 (F-5) STOP (E-E) mode



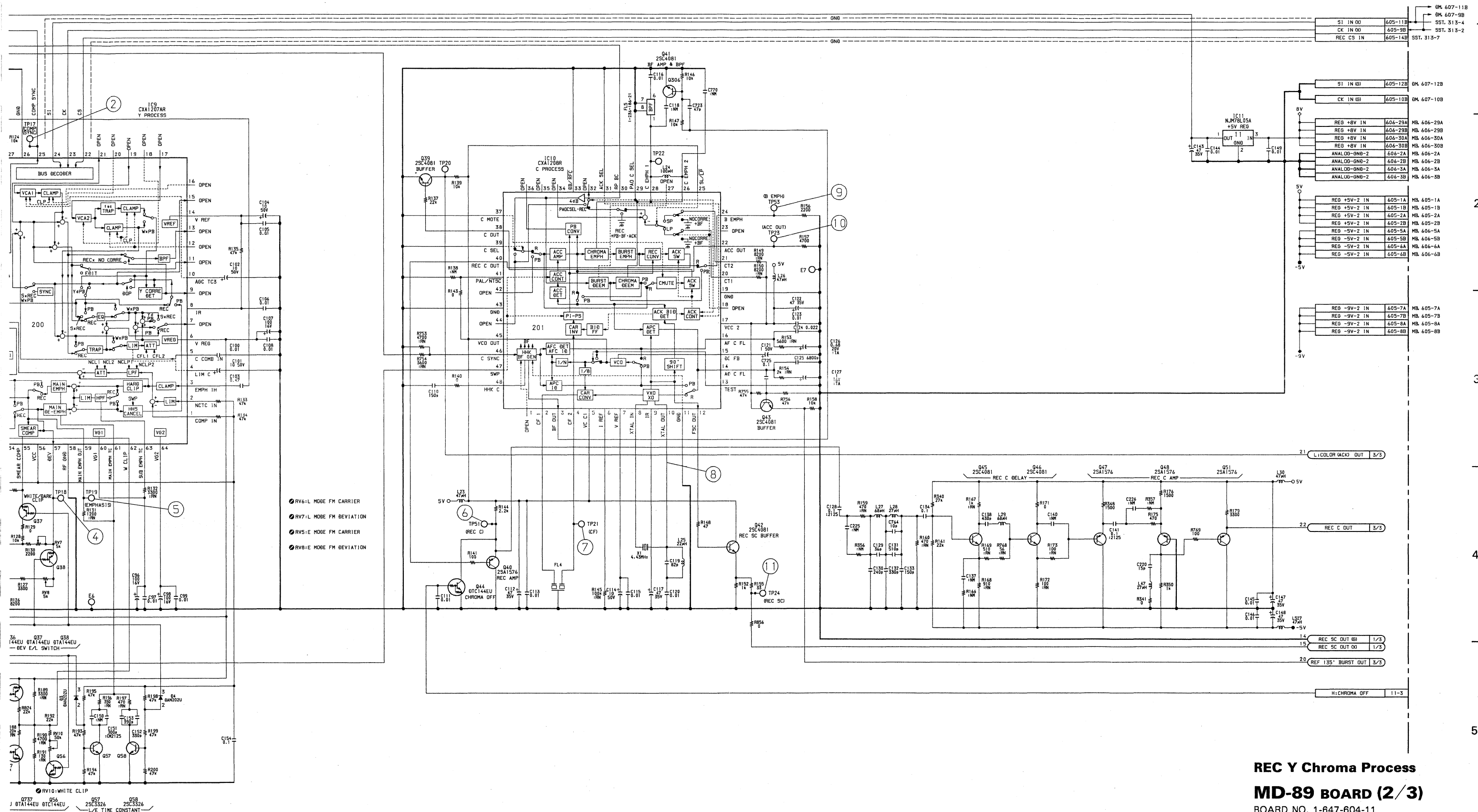
⑧ IC10 pin 10 (K-2) STOP (E-E) mode



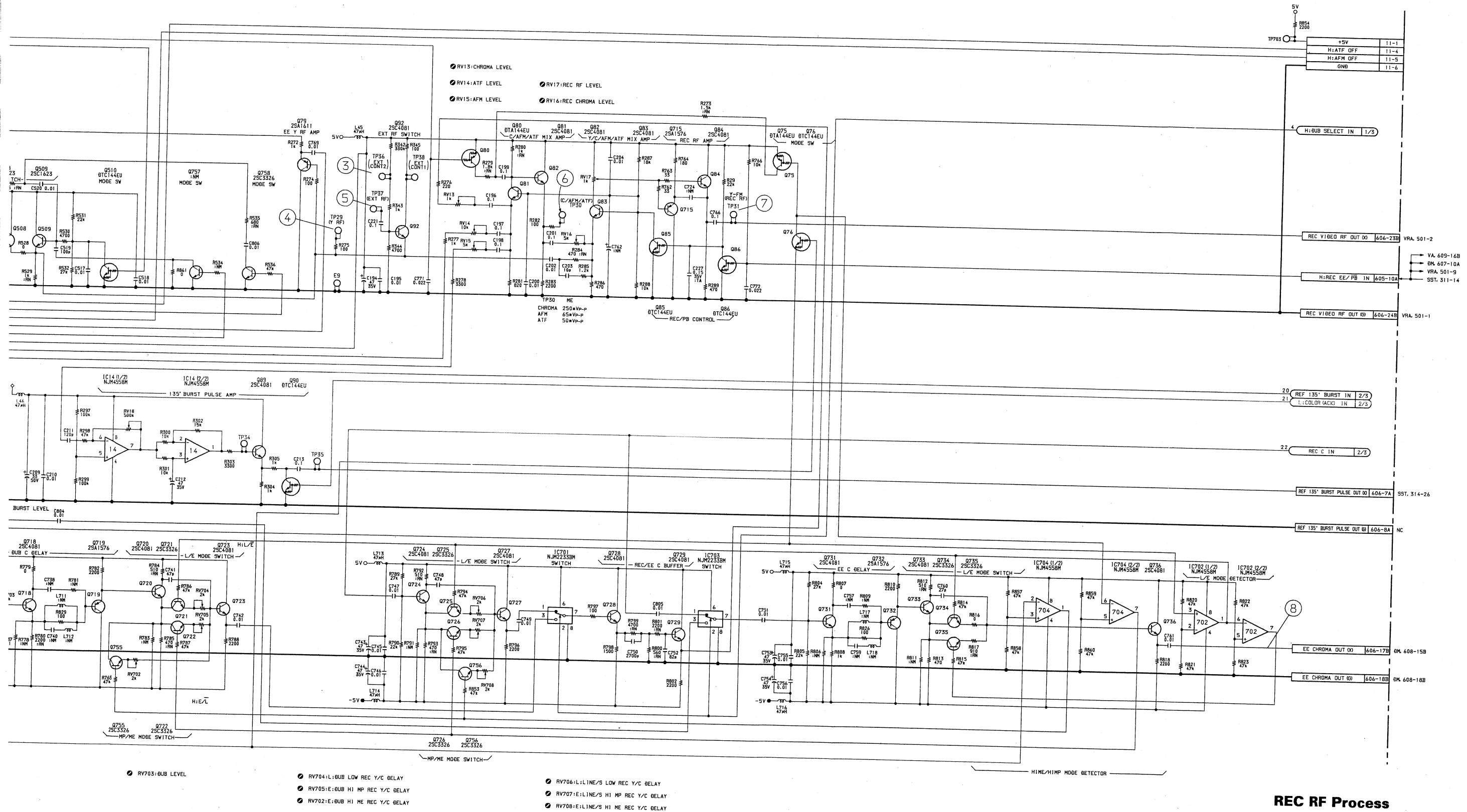
Measurement Condition  
VIDEO IN: EBU color-bars  
STOP (E-E) mode









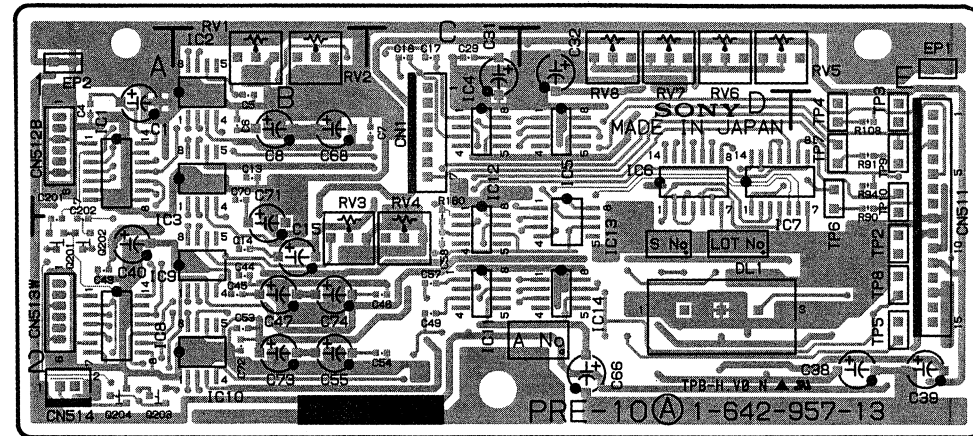


3

4

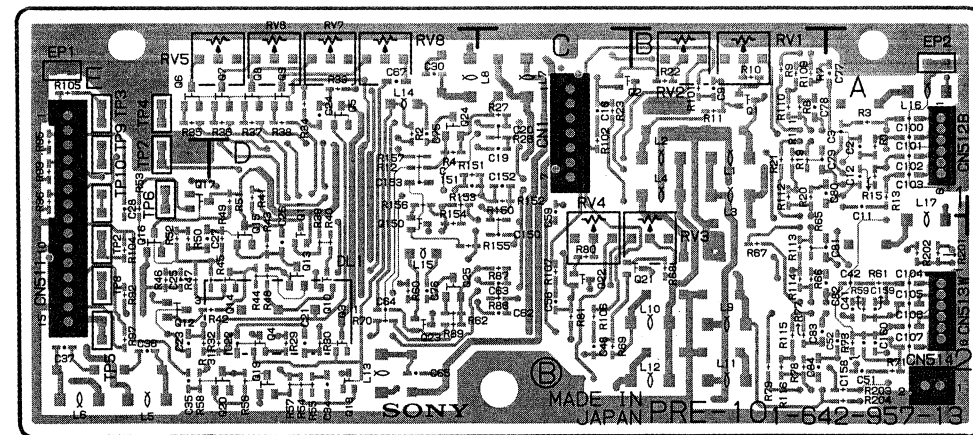
5

PRE-10P (1-642-957-13)

**PRE-10P BOARD****A Side**

1-642-957-13 A SIDE

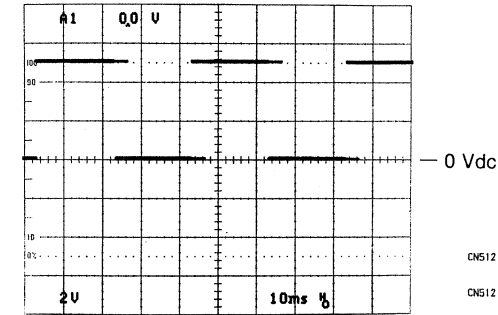
A Side is the same as Component Side

**PRE-10P BOARD****B Side**

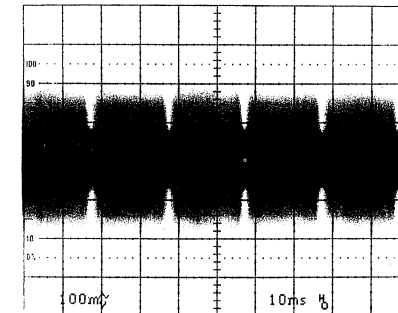
1-642-957-13 B SIDE

B Side is the same as Soldering Side

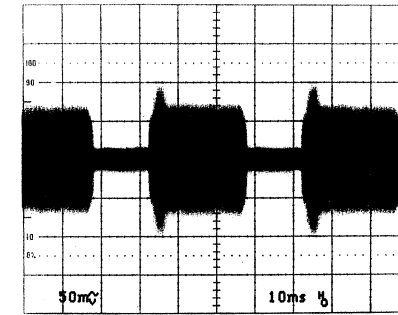
① TP7 (E-1), TP-10 (E-1) PB mode



② TP9 (E-1) PB mode

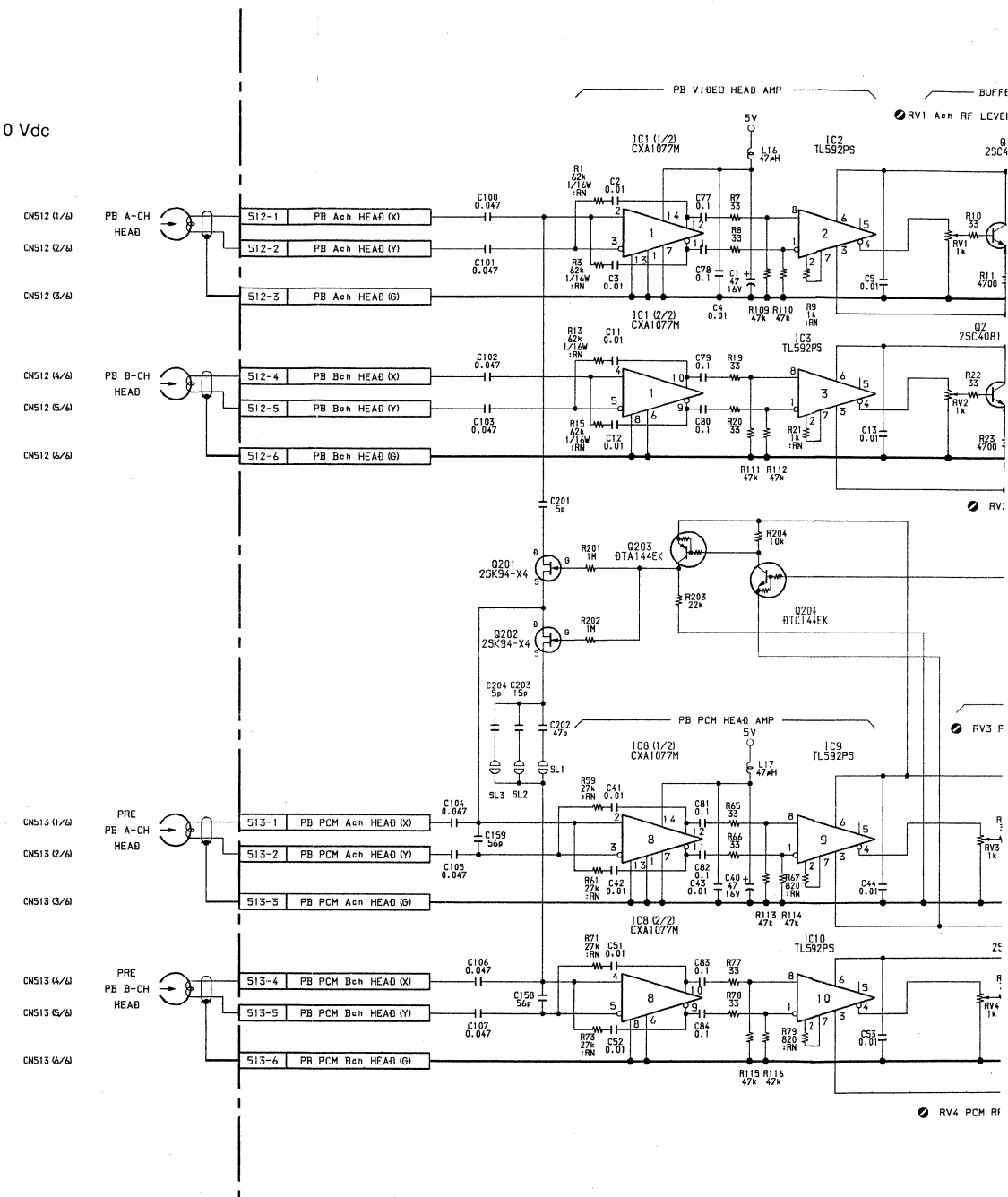


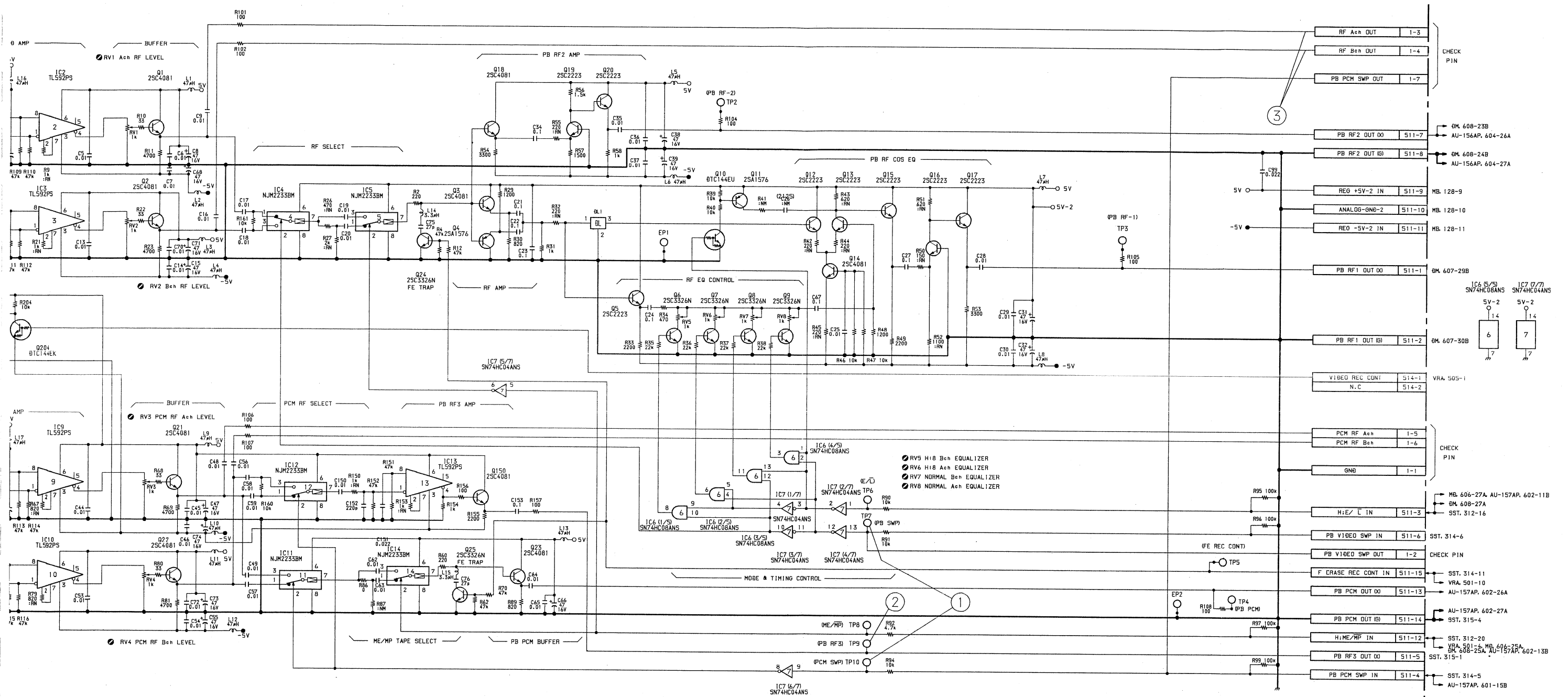
③ CN1-3 (C-1), CN1-4 (C-1) PB mode

**Measurement Condition**

VIDEO IN: EBU color-bars

PB mode: (WR5-8CSE: color bars)





**PB Head Amp, RF EQ**  
**PRE-10P BOARD**  
 BOARD NO. 1-642-957-13  
 EVO-9850P (EK) : #10001—



VRA-4P (1-642-958-13)

CN501 A-2  
CN502 F-2  
CN503 D-1  
CN504 B-1  
CN505 B-3

D2 D-2

E1 F-2  
E2 F-1

IC1 E-2  
IC3 B-3  
IC4 B-2  
IC5 C-2  
IC6 E-2

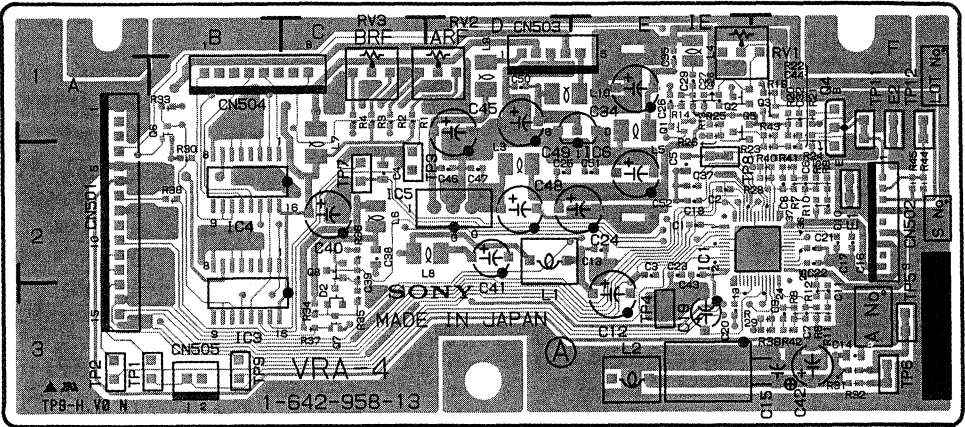
Q1 E-1  
Q2 E-1  
Q3 F-1  
Q4 F-1  
Q5 E-1  
Q6 B-1  
Q7 C-3  
Q8 C-2

RV1 F-1  
RV2 D-1  
RV3 C-1

TP1 A-3  
TP2 A-3  
TP3 D-2  
TP4 E-3  
TP5 F-3  
TP6 F-3  
TP7 C-2  
TP8 E-2  
TP9 B-3  
TP11 F-1  
TP12 F-1

VRA-4P BOARD

A Side

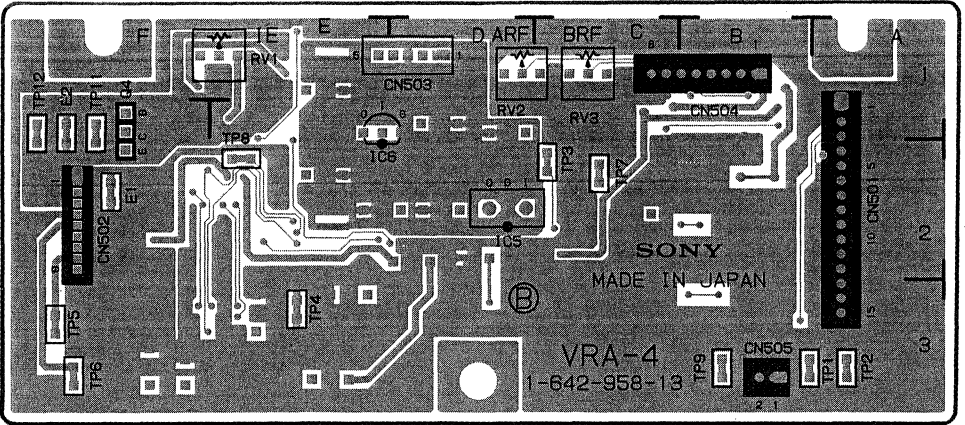


1-642-958-13 A SIDE

A Side is the same as Component Side

VRA-4P BOARD

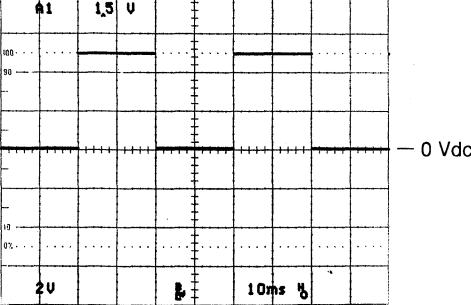
B Side



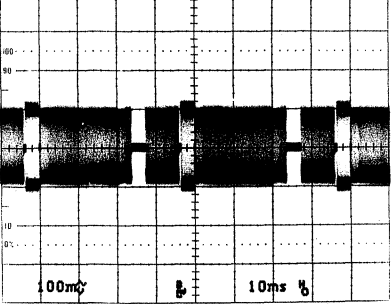
1-642-958-13 B SIDE

B Side is the same as Soldering Side

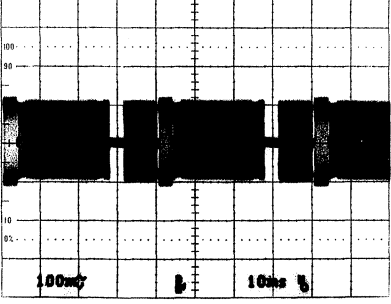
① TP3 (D-2) REC mode



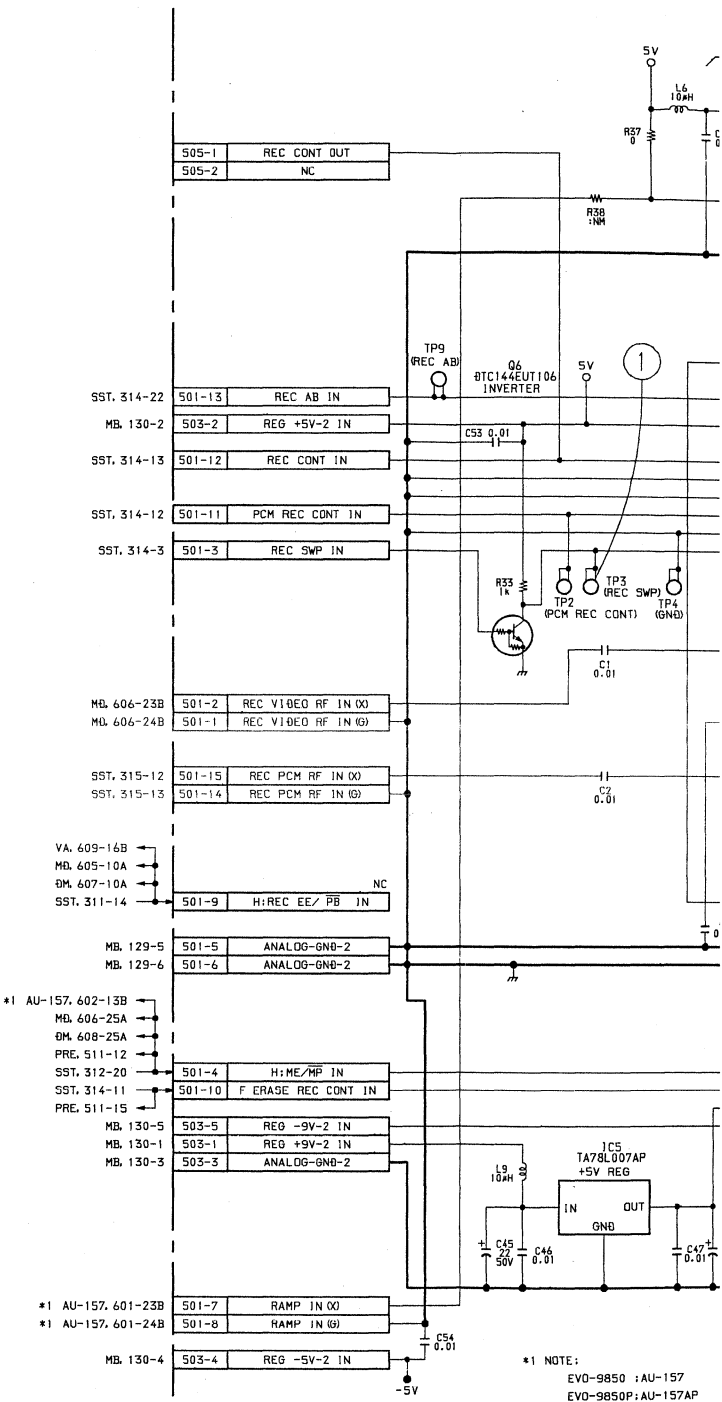
② TP5 (F-3) REC mode



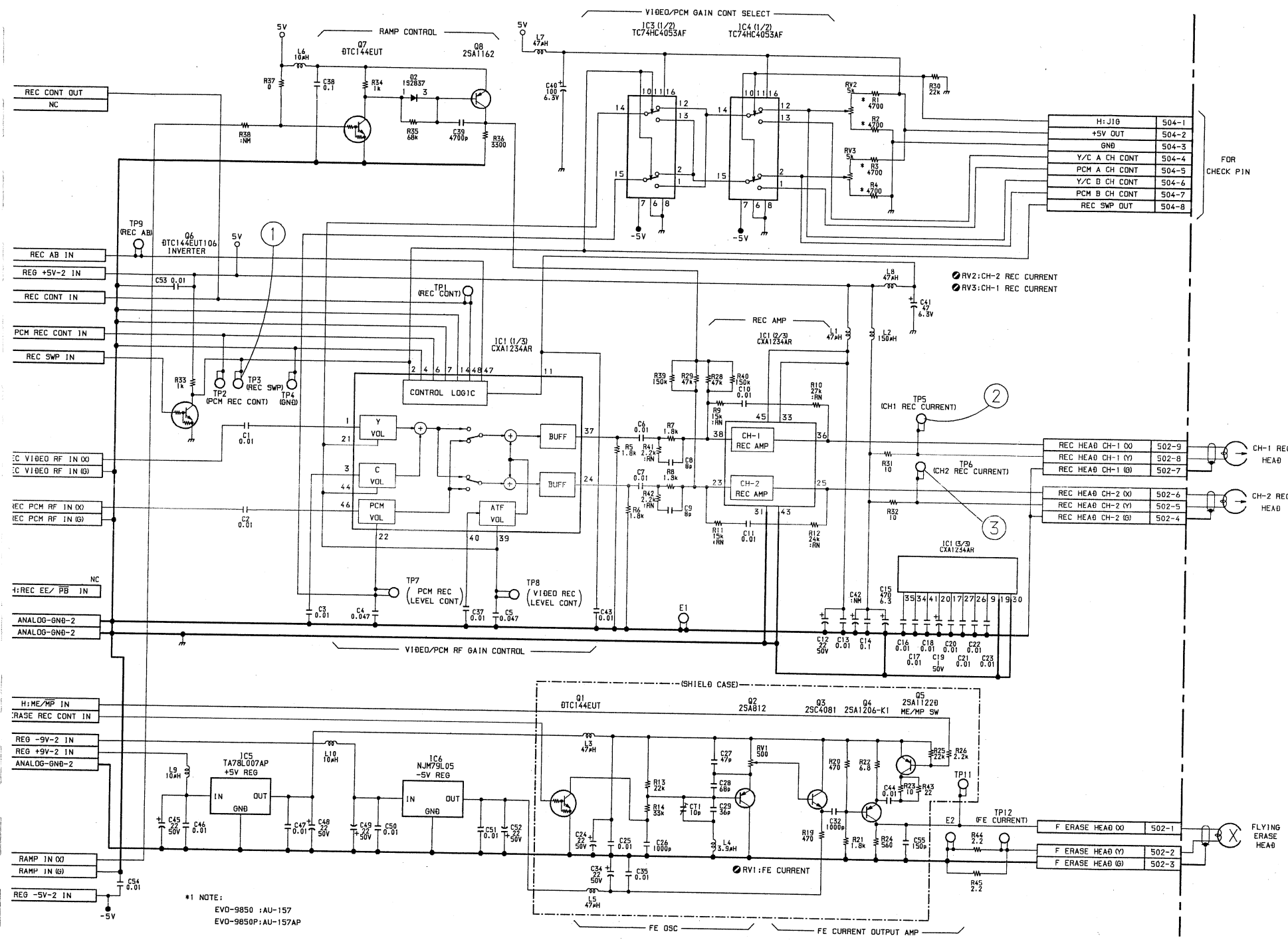
③ TP6 (F-3) REC mode



Measurement Condition  
VIDEO IN: EBU color-bars  
REC mode



\*1 NOTE:  
EVO-9850 : AU-157  
EVO-9850P : AU-157AP



FOR CHECK PIN

|               |       |
|---------------|-------|
| H:J10         | 504-1 |
| +5V OUT       | 504-2 |
| GND           | 504-3 |
| Y/C A CH CONT | 504-4 |
| PCM A CH CONT | 504-5 |
| Y/C B CH CONT | 504-6 |
| PCM B CH CONT | 504-7 |
| REC SWP OUT   | 504-8 |

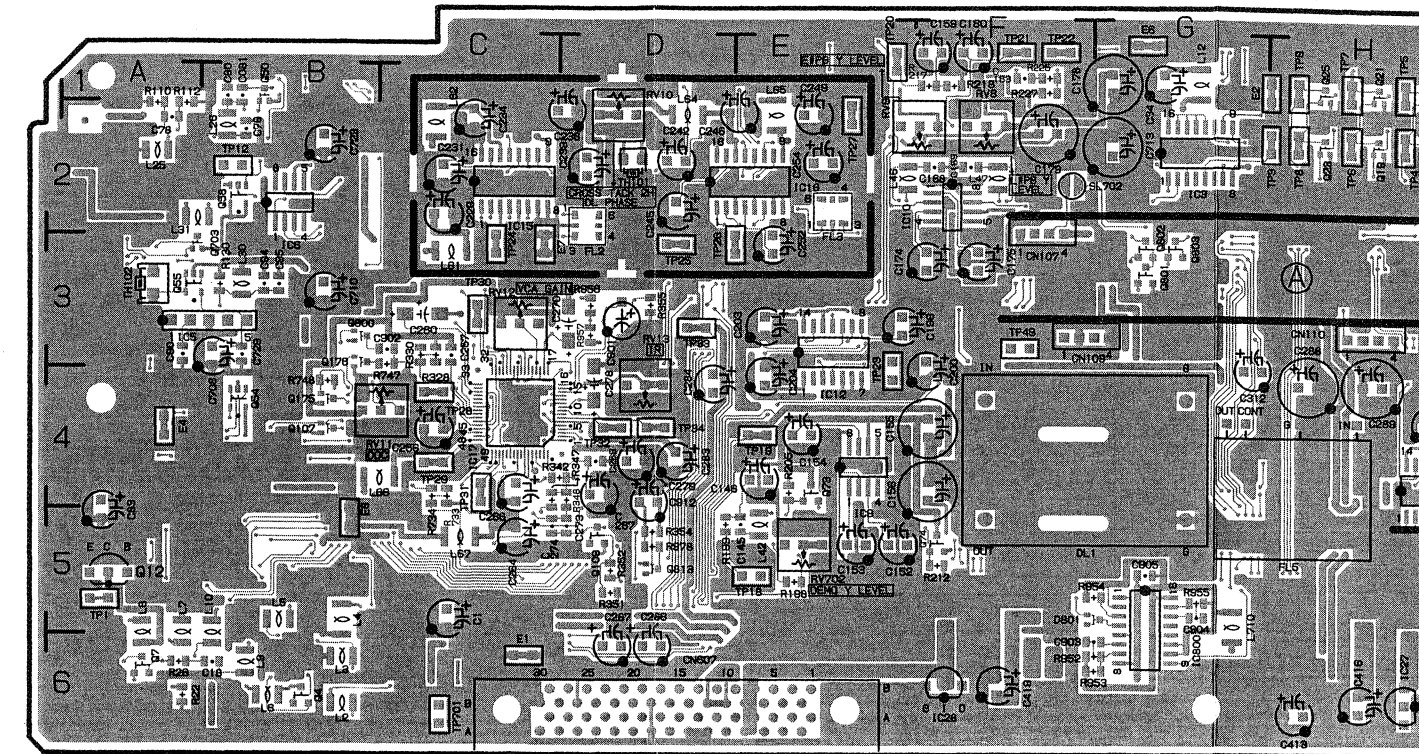
|                    |       |
|--------------------|-------|
| REC HEAD CH-1 (00) | 502-9 |
| REC HEAD CH-1 (Y)  | 502-8 |
| REC HEAD CH-1 (0)  | 502-7 |
| REC HEAD CH-2 (00) | 502-6 |
| REC HEAD CH-2 (Y)  | 502-5 |
| REC HEAD CH-2 (0)  | 502-4 |

|                   |       |
|-------------------|-------|
| F ERASE HEAD (00) | 502-1 |
| F ERASE HEAD (Y)  | 502-2 |
| F ERASE HEAD (0)  | 502-3 |

**REC Head Amp  
Flying Erase OSC  
VRA-4P BOARD**  
BOARD NO. 1-642-958-13  
EVO-9850P (EK) : #10001—

\*1 NOTE:  
EVO-9850 :AU-157  
EVO-9850P:AU-157AP

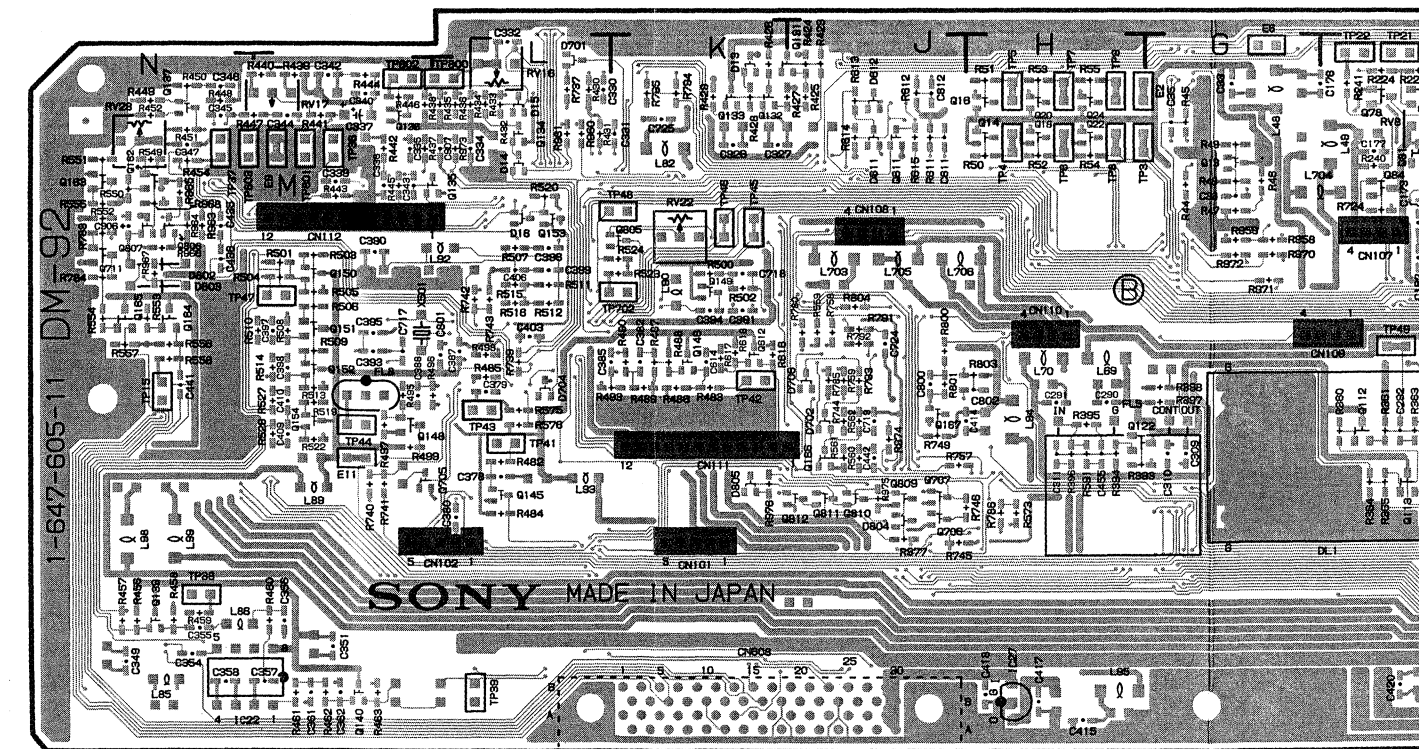
# DM-92 BOARD A Side



1-647-605-11 A SIDE

A Side is the same as Component Side

# DM-92 BOARD B Side



1-647-605-11 B SIDE

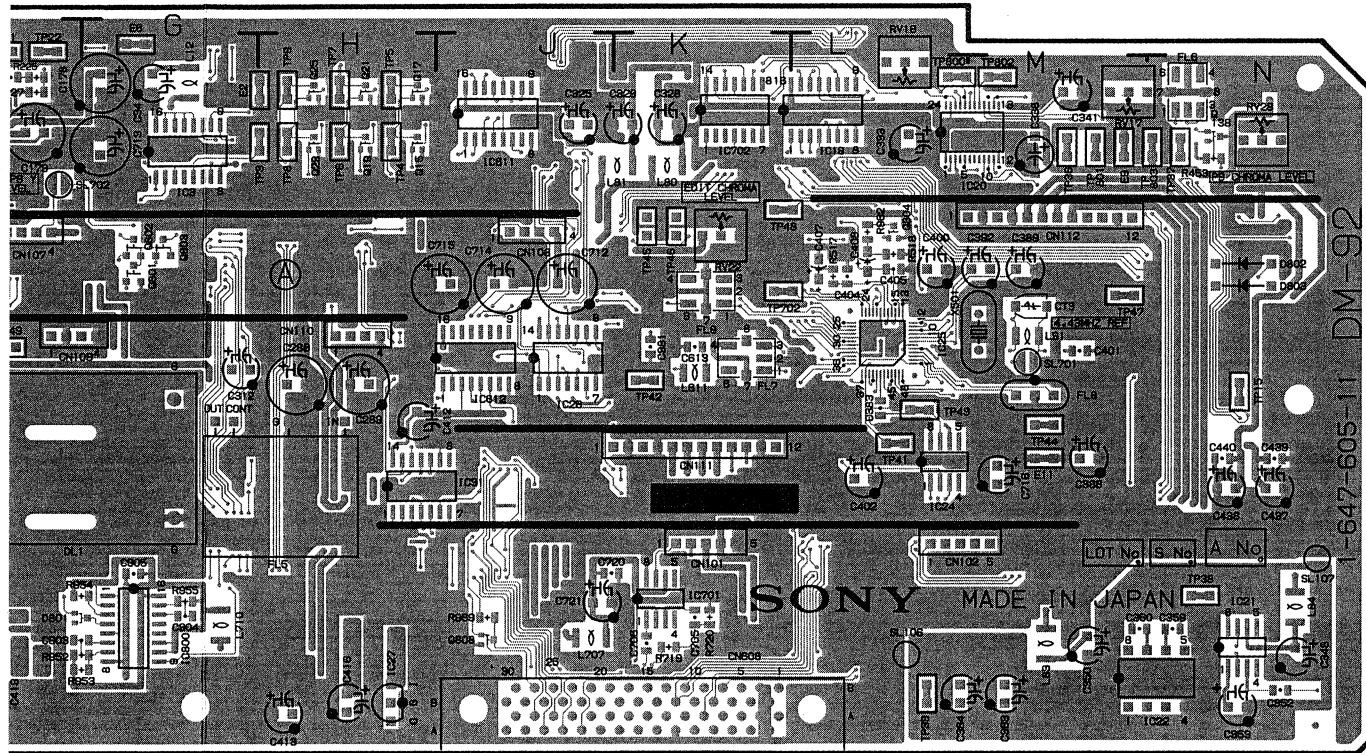
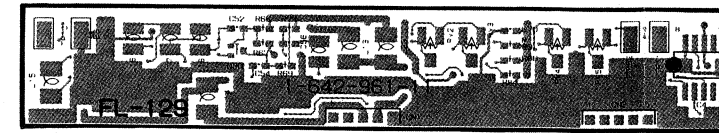
B Side is the same as Soldering Side

DM-92 (1-647-605-11)

|       |      |       |      |       |      |       |     |
|-------|------|-------|------|-------|------|-------|-----|
| CN607 | D-6  | IC612 | J-4  | Q122  | H-4* | TP3   | H-2 |
| CN608 | K-6  | IC701 | K-5  | Q131  | K-1* | TP4   | H-2 |
|       |      | IC702 | K-2  | Q132  | K-1* | TP5   | H-1 |
| CT3   | M-3  | IC800 | G-5  | Q133  | K-1* | TP6   | H-2 |
|       |      |       |      | Q134  | L-2* | TP7   | H-1 |
| D1    | B-5* | Q1    | C-5* | Q135  | M-2* | TP8   | H-2 |
| D2    | B-5* | Q2    | B-6* | Q136  | M-2* | TP9   | H-1 |
| D5    | A-2* | Q3    | B-5* | Q137  | N-2* | TP12  | B-2 |
| D6    | B-3* | Q4    | B-6  | Q138  | N-2  | TP15  | N-4 |
| D7    | B-3* | Q5    | B-6* | Q139  | N-5* | TP18  | E-5 |
| D8    | B-3* | Q6    | A-5* | Q140  | M-6* | TP19  | E-4 |
| D12   | D-6* | Q7    | A-6  | Q145  | L-4* | TP20  | E-1 |
| D13   | K-1* | Q8    | B-6* | Q146  | K-3* | TP21  | F-1 |
| D14   | L-2* | Q9    | A-5* | Q148  | M-4* | TP22  | F-1 |
| D15   | L-2* | Q10   | A-6* | Q149  | K-3* | TP23  | E-4 |
| D611  | J-2* | Q11   | B-6* | Q150  | M-3* | TP24  | C-3 |
| D612  | J-1* | Q12   | A-5  | Q151  | M-3* | TP25  | D-3 |
| D701  | L-1* | Q13   | G-2* | Q152  | M-4* | TP26  | E-3 |
| D702  | J-4* | Q14   | H-2* | Q154  | M-4* | TP27  | E-2 |
| D704  | L-4* | Q15   | H-2  | Q162  | N-2* | TP28  | C-4 |
| D705  | C-3* | Q16   | H-2* | Q163  | N-2* | TP29  | C-4 |
| D706  | J-4* | Q17   | H-1  | Q164  | N-3* | TP30  | C-3 |
| D707  | B-3* | Q18   | H-2* | Q165  | N-3* | TP31  | C-4 |
| D800  | C-3* | Q19   | H-2  | Q166  | J-4* | TP32  | D-4 |
| D801  | G-5  | Q20   | H-2* | Q167  | J-4* | TP33  | D-3 |
| D802  | N-3  | Q21   | H-1  | Q175  | B-4  | TP34  | D-4 |
| D803  | N-3  | Q22   | H-2* | Q176  | B-3  | TP36  | M-2 |
| D804  | J-5* | Q23   | H-2  | Q611  | J-2* | TP37  | N-2 |
| D805  | K-4* | Q24   | H-2* | Q612  | K-3* | TP38  | N-5 |
|       |      | Q25   | H-1  | Q701  | A-3* | TP39  | L-6 |
| DL1   | F-4  | Q46   | A-3* | Q703  | A-3  | TP41  | L-4 |
|       |      | Q48   | A-2* | Q704  | C-4* | TP42  | K-4 |
| E1    | C-6  | Q49   | B-2* | Q706  | J-5* | TP43  | L-4 |
| E2    | H-1  | Q50   | B-1  | Q707  | J-4* | TP44  | M-4 |
| E4    | A-4  | Q51   | B-2* | Q800  | B-3  | TP45  | K-2 |
| E6    | G-1  | Q52   | B-2* | Q801  | G-3  | TP46  | K-2 |
| E7    | C-3  | Q53   | B-5* | Q802  | G-3  | TP47  | M-3 |
| E8    | B-5  | Q54   | B-4  | Q803  | G-3  | TP48  | K-2 |
| E9    | M-2  | Q55   | A-3  | Q804  | L-2  | TP49  | F-3 |
| E11   | M-4  | Q56   | B-3* | Q805  | K-3* | TP701 | C-6 |
|       |      | Q57   | A-3* | Q806  | N-2* | TP702 | K-3 |
| FL2   | D-2  | Q58   | B-2  | Q807  | N-2* | TP800 | L-1 |
| FL3   | E-2  | Q70   | E-5* | Q809  | J-4* | TP801 | M-2 |
| FL5   | H-4  | Q71   | E-4* | Q810  | J-4* | TP802 | M-1 |
| FL6   | N-1  | Q72   | E-5* | Q811  | J-4* | TP803 | N-2 |
| FL7   | K-3  | Q73   | E-4  | Q812  | J-4* |       |     |
| FL8   | M-4  | Q74   | F-5  | Q813  | D-5  | X501  | M-3 |
| FL9   | K-3  | Q75   | E-4* | Q815  | B-3* |       |     |
|       |      | Q76   | E-1* | Q816  | B-3* |       |     |
| IC3   | G-2  | Q77   | F-1* | Q818  | J-5  |       |     |
| IC5   | A-3  | Q78   | F-1* | Q819  | G-5* |       |     |
| IC6   | B-2  | Q80   | E-2* | Q820  | F-5* |       |     |
| IC9   | E-4  | Q81   | F-2* |       |      |       |     |
| IC10  | F-2  | Q82   | F-2* | RV8   | F-2  |       |     |
| IC12  | E-4  | Q83   | F-2* | RV9   | F-2  |       |     |
| IC15  | C-2  | Q84   | F-2* | RV10  | D-2  |       |     |
| IC16  | D-2  | Q101  | D-2* | RV11  | C-4  |       |     |
| IC17  | C-4  | Q102  | D-2* | RV12  | C-3  |       |     |
| IC19  | L-2  | Q103  | D-2* | RV13  | D-4  |       |     |
| IC20  | L-2  | Q104  | D-3* | RV16  | L-1  |       |     |
| IC21  | N-6  | Q105  | E-2* | RV17  | M-1  |       |     |
| IC22  | M-6  | Q106  | E-3* | RV22  | K-3  |       |     |
| IC24  | L-4  | Q107  | B-4  | RV28  | N-2  |       |     |
| IC25  | L-3  | Q108  | D-5* | RV702 | E-5  |       |     |
| IC26  | J-4  | Q109  | D-5  |       |      |       |     |
| IC27  | H-6  | Q110  | D-5* | TH101 | D-2  |       |     |
| IC28  | F-6  | Q111  | D-5* | TH102 | A-3  |       |     |
| IC31  | H-5  | Q112  | F-4* |       |      |       |     |
| IC611 | J-2  | Q113  | F-4* | TP1   | A-5  |       |     |

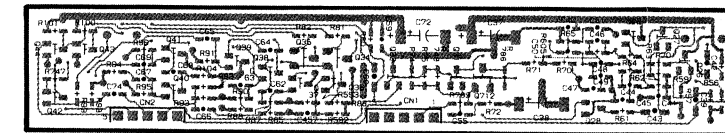
\* mark ; B SIDE mount



**FL-129P BOARD****A Side**

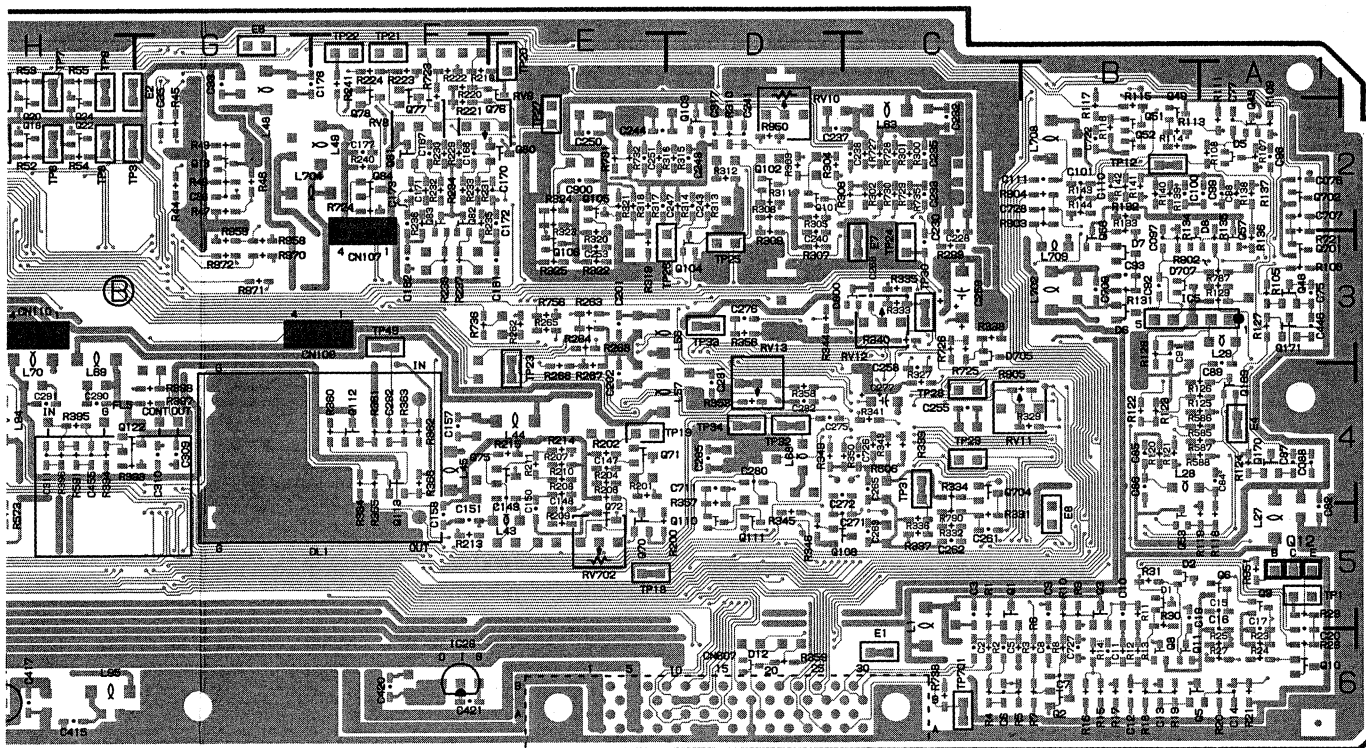
1-642-961-11 A SIDE

A Side is the same as Component Side

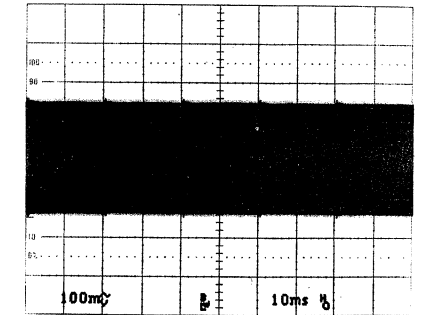
**FL-129P BOARD****B Side**

1-642-961-11 B SIDE

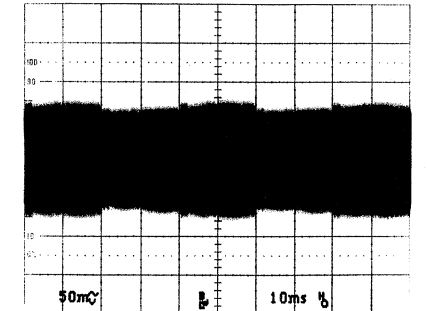
B Side is the same as Soldering Side



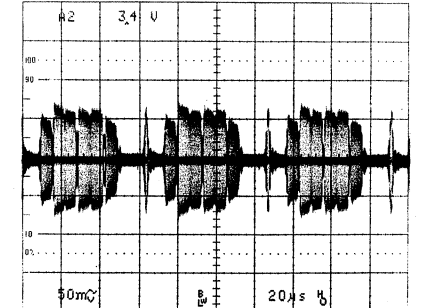
① TP12 (B-2) PB mode



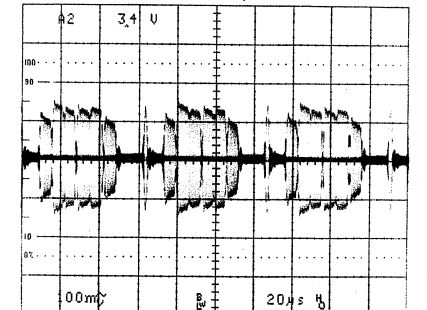
② TP1 (A-5) PB mode



③ TP52 (FL-129 Board) PB mode



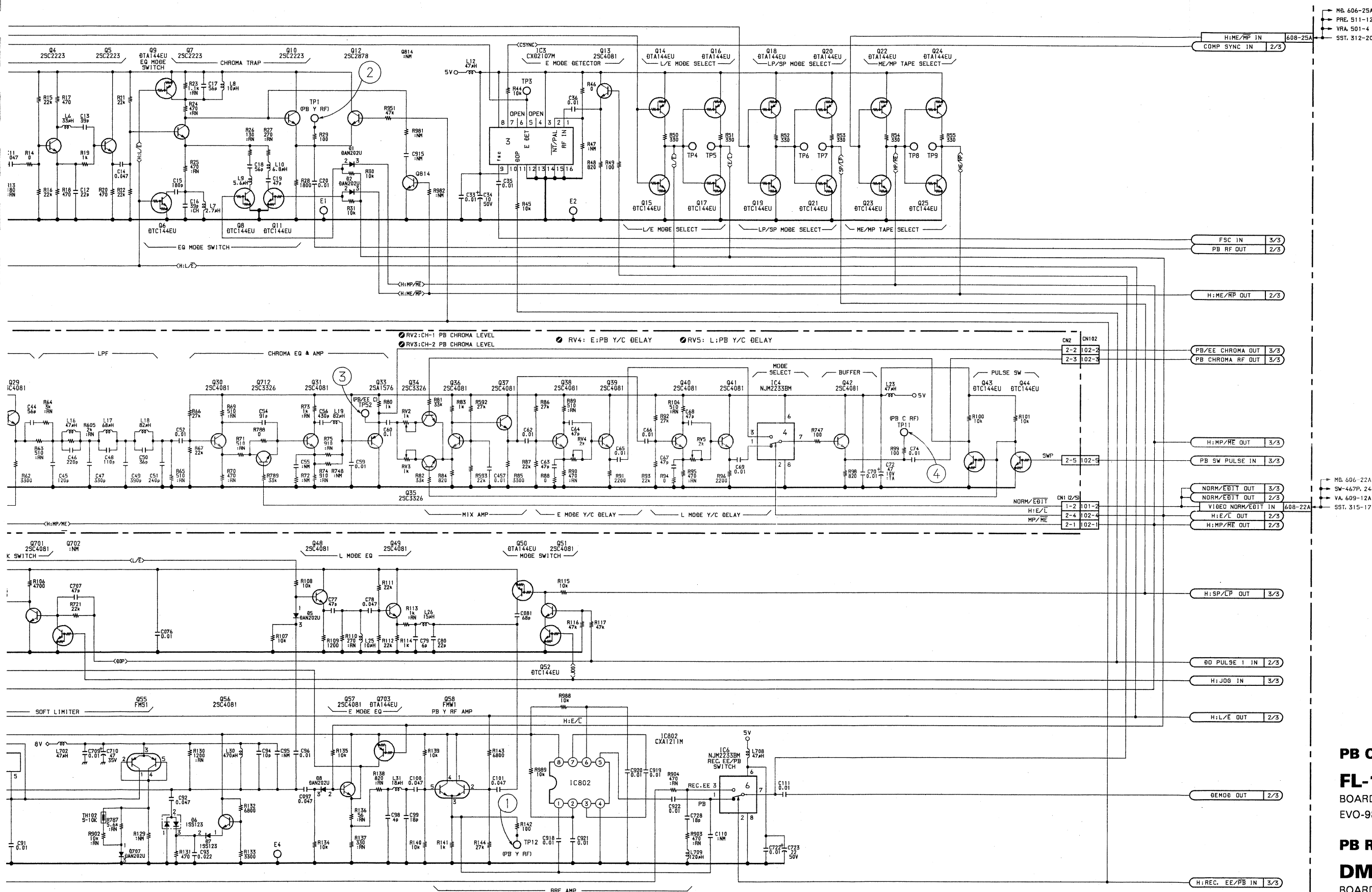
④ TP11 (FL-129 Board) PB mode

**Measurement Condition**

VIDEO IN: EBU color-bars

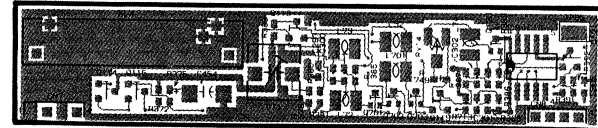
PB mode: (WR5-8CSE: color bars)





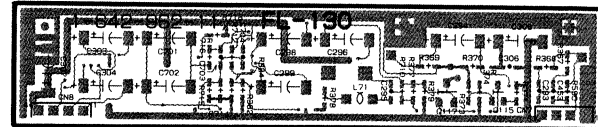
**PB Chroma LPF**  
**FL-129P BOARD**  
 BOARD NO. 1-642-961-11  
 EVO-9850P (EK) : #10001—

**PB RF Process**  
**DM-92 BOARD (1/3)**  
 BOARD NO. 1-647-605-11  
 EVO-9850P (EK) : #10001—

**FL-130P BOARD****A Side**

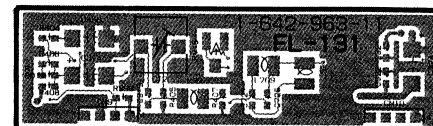
1-642-962-11 A SIDE

A Side is the same as Component Side

**FL-130P BOARD****B Side**

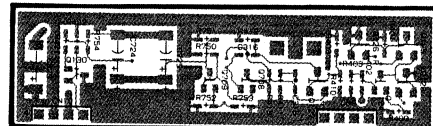
1-642-962-11 B SIDE

B Side is the same as Soldering Side

**FL-131P BOARD****A Side**

1-642-963-11 A SIDE

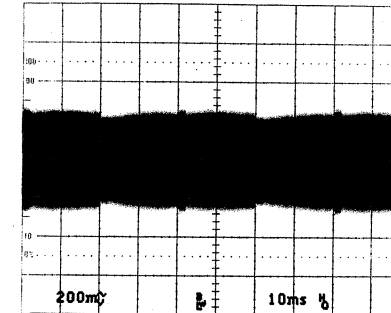
A Side is the same as Component Side

**FL-131P BOARD****B Side**

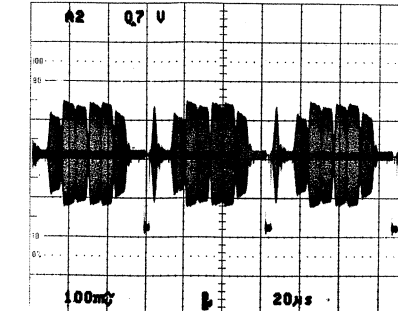
1-642-963-11 B SIDE

B Side is the same as Soldering Side

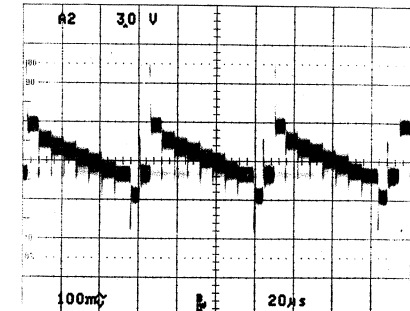
① TP28 (C-4) PB mode



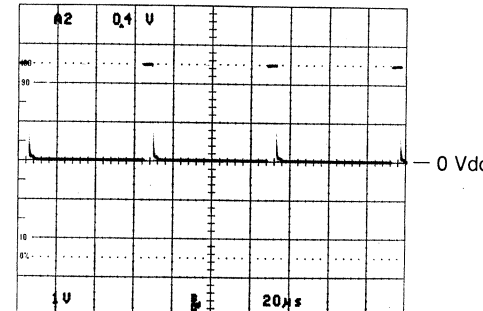
⑤ TP24 (C-3) PB mode



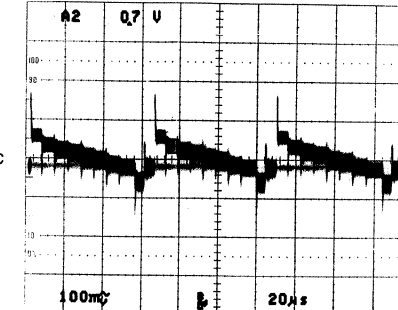
⑨ TP19 (E-4) PB mode



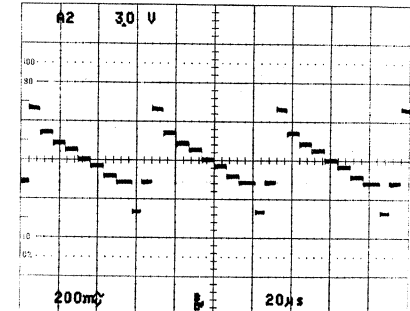
② IC17 pin 25 (C-4) PB mode



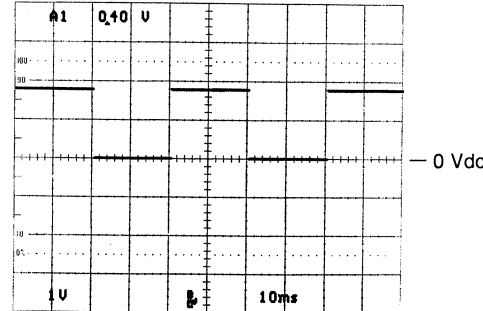
⑥ TP18 (E-5) PB mode



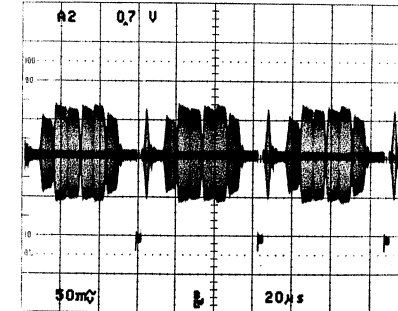
⑩ TP22 (F-1) PB mode



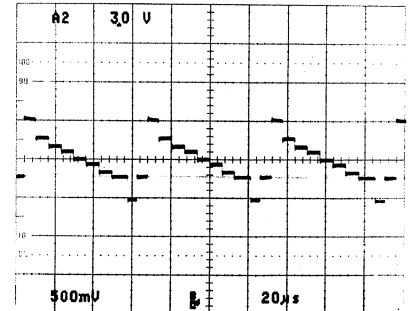
③ TP31 (C-4) PB mode



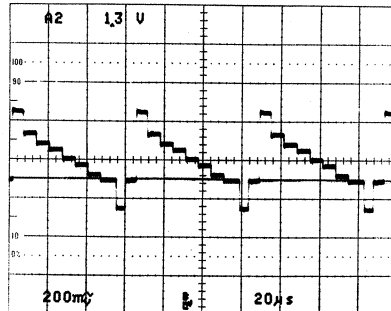
⑦ TP25 (D-3) PB mode



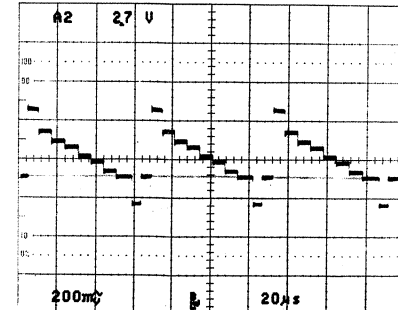
⑪ TP23 (E-4) PB mode



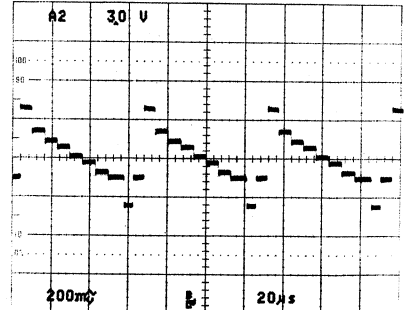
④ TP32 (D-4) PB mode



⑧ TP21 (F-1) PB mode



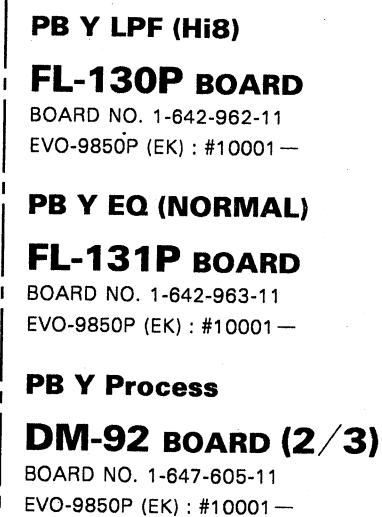
⑫ TP35 (FL-130P Board) PB mode

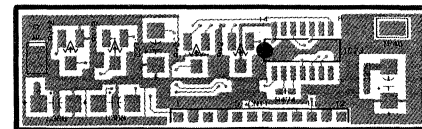


**Measurement Condition**  
 VIDEO IN: EBU color-bars  
 PB mode: (WR5-8CSE: color bars)



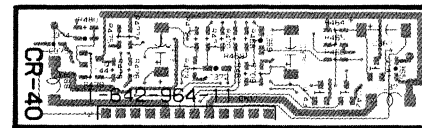




**CR-40 BOARD****A Side**

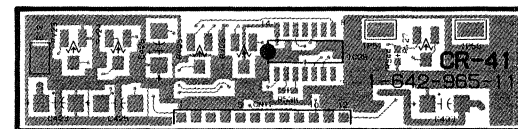
1-642-964-11 A SIDE

A Side is the same as Component Side

**CR-40 BOARD****B Side**

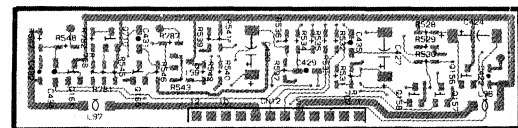
1-642-964-11 B SIDE

B Side is the same as Soldering Side

**CR-41 BOARD****A Side**

1-642-965-11 A SIDE

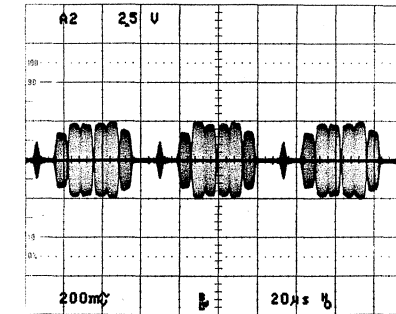
A Side is the same as Component Side

**CR-41 BOARD****B Side**

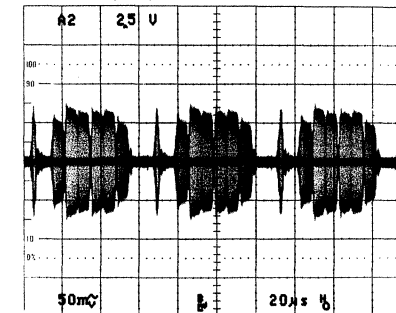
1-642-965-11 B SIDE

B Side is the same as Soldering Side

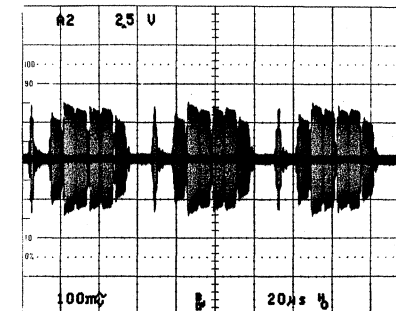
① TP41 (L-4) PB mode



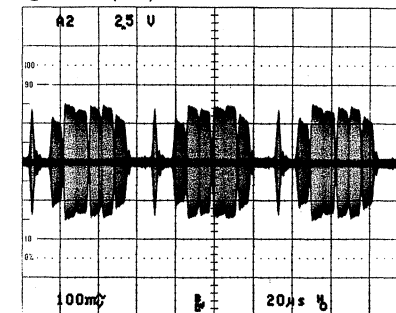
② TP42 (K-4) PB mode



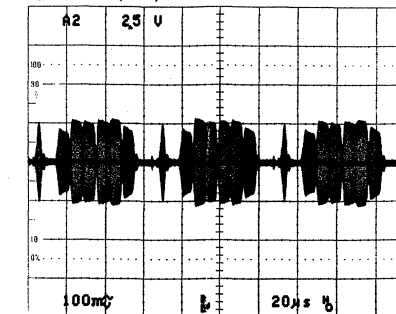
③ TP43 (L-4) PB mode



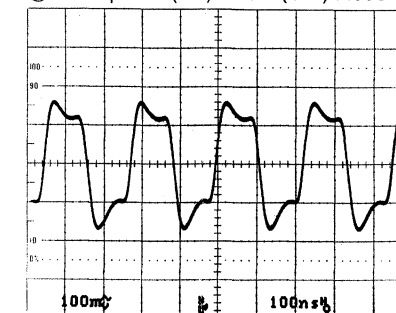
④ TP45 (K-2) PB mode



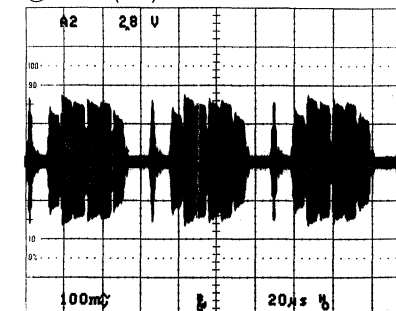
⑤ TP46 (K-2) PB mode



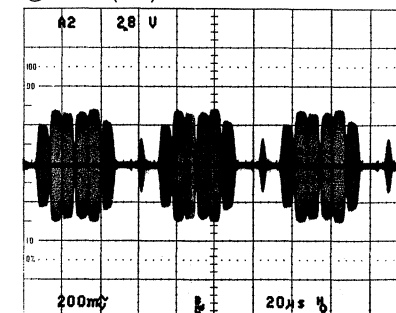
⑥ IC25 pin 10 (L-3) STOP (E-E) mode



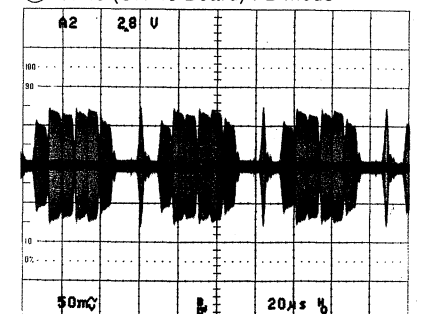
⑦ TP48 (K-2) PB mode



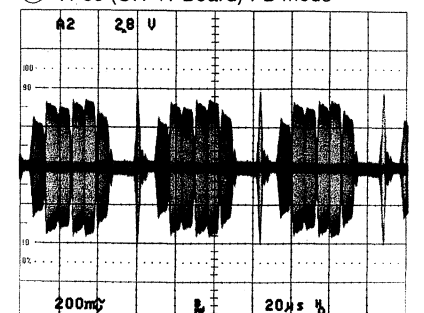
⑧ TP15 (N-4) PB mode



⑨ TP40 (CR-40 Board) PB mode



⑩ TP50 (CR-41 Board) PB mode

**Measurement Condition**

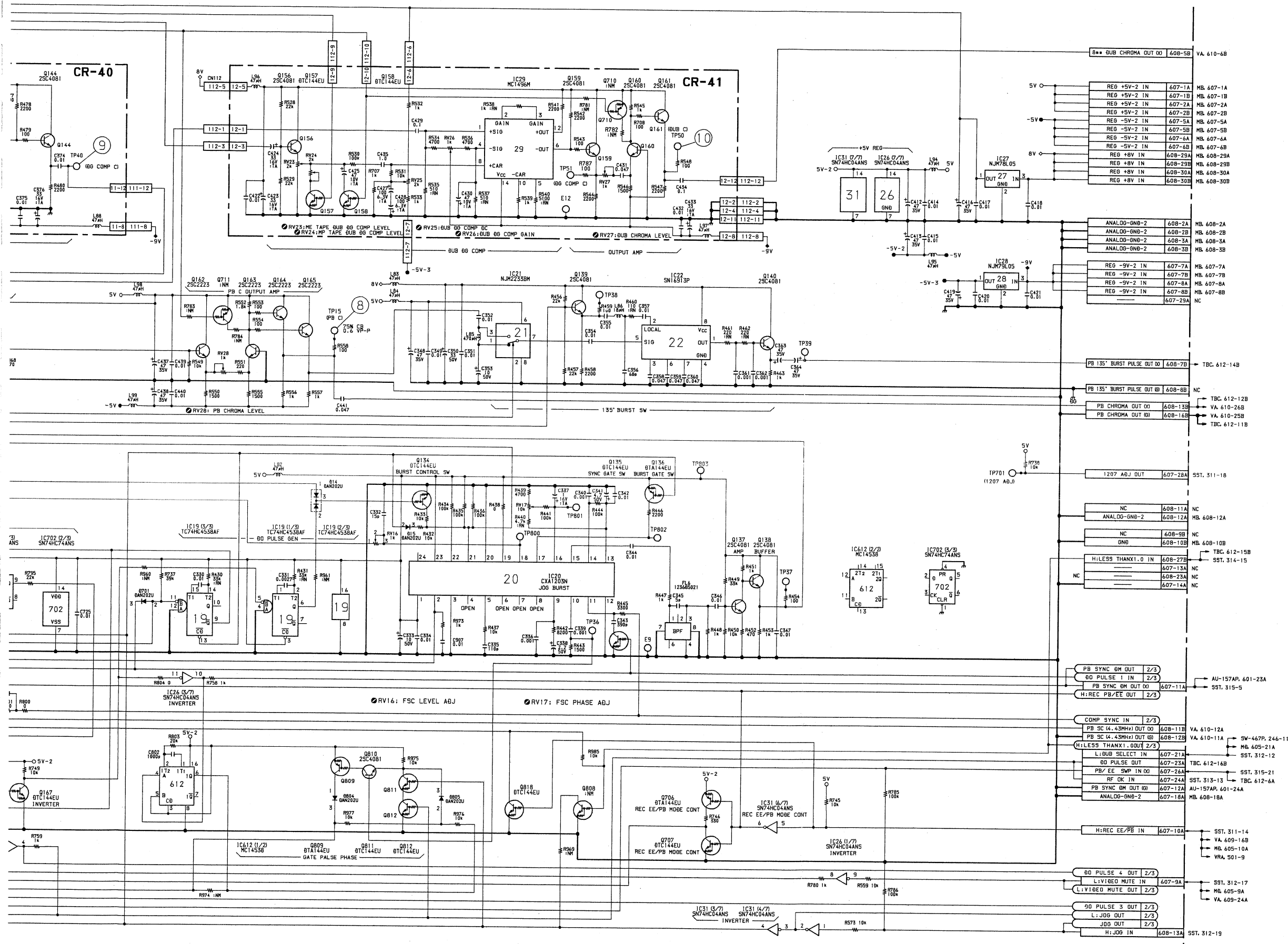
VIDEO IN: EBU color-bars

PB mode: (WR5-8CSE: color bars)

STOP (E-E) mode





**DG Compensator (LINE)****CR-40 BOARD**

BOARD NO. 1-642-964-11

EVO-9850P (EK) : #10001 -

**DG Compensator (DUB)****CR-41 BOARD**

BOARD NO. 1-642-965-11

EVO-9850P (EK) : #10001 -

**PB Chroma Process****DM-92 BOARD (3/3)**

BOARD NO. 1-647-605-11

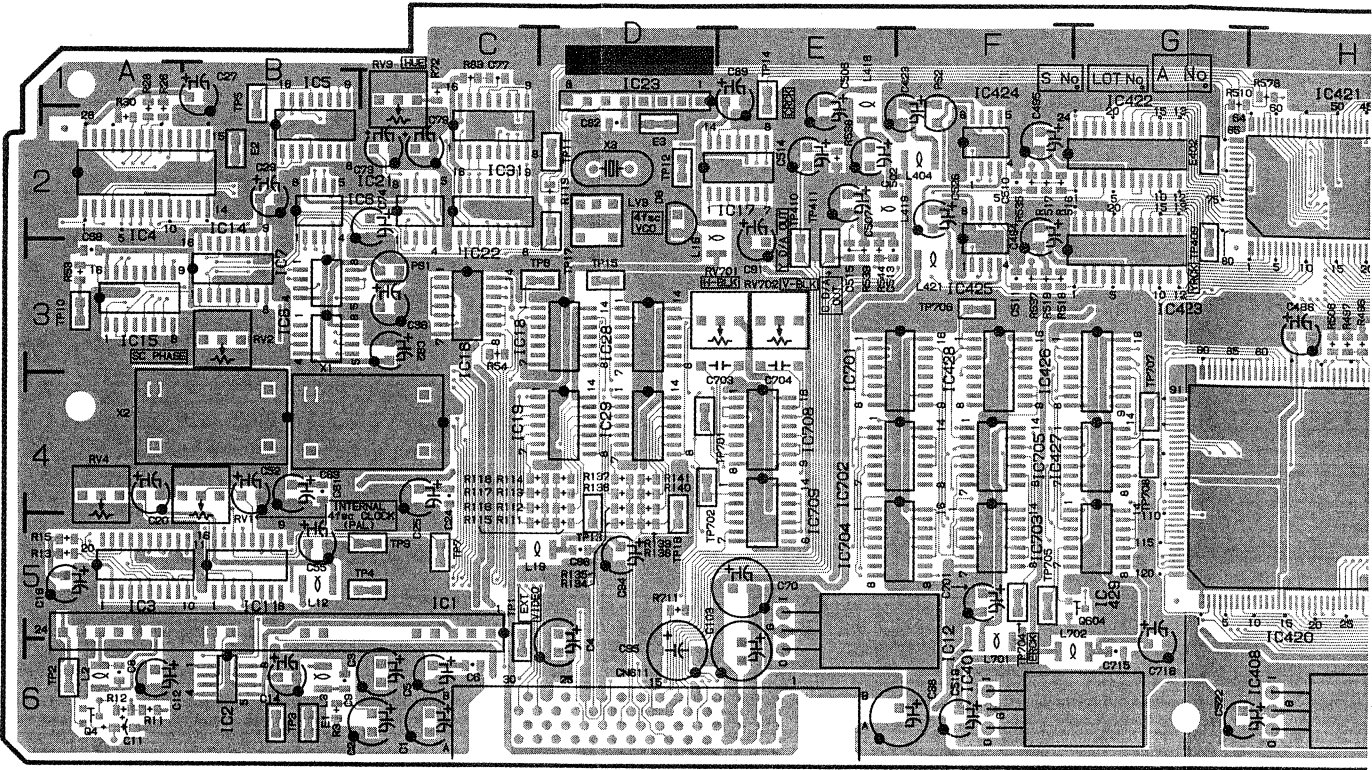
EVO-9850P (EK) : #10001 -

TBC-27 (1-647-603-11)

|       |      |       |      |       |      |
|-------|------|-------|------|-------|------|
| CN611 | D-6  | IC422 | G-2  | RV2   | B-3  |
| CN612 | K-6  | IC423 | G-3  | RV3   | C-1  |
|       |      | IC424 | F-2  | RV401 | N-6  |
| CV401 | N-3  | IC425 | F-3  | RV402 | N-5  |
| CV402 | L-6  | IC426 | F-3  | RV701 | E-3  |
|       |      | IC427 | F-4  | RV702 | E-3  |
| D2    | B-6* | IC428 | F-3  |       |      |
| D3    | A-6* | IC429 | F-4  | TH1   | B-2* |
| D6    | D-2  | IC430 | K-5  |       |      |
| D401  | G-4* | IC701 | E-3  | TP1   | C-6  |
| D402  | N-2* | IC702 | E-4  | TP2   | A-6  |
| D407  | M-3* | IC703 | F-4  | TP3   | B-6  |
| D408  | M-3* | IC704 | E-4  | TP4   | C-5  |
| D409  | H-2* | IC705 | F-4  | TP5   | B-1  |
| D601  | G-5* | IC708 | E-4  | TP6   | D-3  |
| D602  | L-5* | IC709 | E-4  | TP7   | C-5  |
|       |      |       |      | TP9   | C-5  |
| E1    | B-6  | LV3   | D-2  | TP10  | A-3  |
| E2    | B-2  |       |      | TP11  | D-2  |
| E3    | D-2  | PS1   | C-3  | TP12  | D-2  |
| E401  | N-3  | PS2   | F-2  | TP13  | D-4  |
| E402  | G-2  |       |      | TP14  | E-1  |
| E403  | M-5  | Q1    | C-6* | TP15  | D-3  |
|       |      | Q2    | C-5* | TP16  | D-4  |
| FB1   | A-4* | Q3    | A-6* | TP17  | D-2  |
| FB2   | E-2* | Q4    | A-6  | TP401 | K-5  |
|       |      | Q5    | B-6* | TP402 | M-4  |
| IC1   | C-5  | Q6    | B-5* | TP403 | M-5  |
| IC2   | B-6  | Q8    | B-5* | TP404 | N-3  |
| IC3   | A-5  | Q9    | C-3* | TP405 | M-2  |
| IC4   | A-2  | Q11   | D-2* | TP406 | M-4  |
| IC5   | B-2  | Q12   | D-2* | TP407 | L-3  |
| IC6   | B-2  | Q13   | D-2* | TP408 | L-5  |
| IC7   | B-3  | Q14   | E-2* | TP409 | G-2  |
| IC8   | B-3  | Q401  | N-6* | TP410 | E-3  |
| IC11  | B-5  | Q402  | N-4* | TP411 | E-3  |
| IC12  | E-5  | Q403  | N-6  | TP412 | N-3  |
| IC14  | B-3  | Q404  | N-5  | TP701 | D-4  |
| IC15  | A-3  | Q405  | N-6  | TP702 | D-4  |
| IC16  | C-3  | Q406  | N-4  | TP704 | F-5  |
| IC17  | D-2  | Q407  | N-5* | TP705 | F-5  |
| IC18  | D-3  | Q408  | N-4  | TP706 | F-3  |
| IC19  | D-4  | Q409  | N-5* | TP707 | G-4  |
| IC21  | C-2  | Q411  | M-4* | TP708 | G-4  |
| IC22  | C-2  | Q412  | M-6* |       |      |
| IC23  | D-1  | Q414  | J-2* | X1    | C-4  |
| IC28  | D-3  | Q415  | L-2* | X2    | B-4  |
| IC29  | D-4  | Q416  | E-2* | X3    | D-2  |
| IC31  | C-2  | Q417  | E-2* | X401  | L-6  |
| IC401 | F-6  | Q418  | E-2* |       |      |
| IC402 | M-2  | Q419  | E-3* |       |      |
| IC403 | M-5  | Q420  | N-6* |       |      |
| IC404 | M-4  | Q421  | N-4* |       |      |
| IC405 | M-2  | Q422  | N-4* |       |      |
| IC406 | L-4  | Q423  | N-4* |       |      |
| IC407 | N-2  | Q424  | M-3* |       |      |
| IC408 | H-6  | Q425  | N-2* |       |      |
| IC409 | L-2  | Q427  | M-3* |       |      |
| IC410 | K-2  | Q428  | M-3* |       |      |
| IC411 | K-2  | Q601  | G-5* |       |      |
| IC412 | L-2  | Q602  | G-5* |       |      |
| IC413 | L-2  | Q603  | G-5* |       |      |
| IC414 | M-3  | Q604  | G-5  |       |      |
| IC415 | J-4  | Q605  | M-5* |       |      |
| IC416 | J-3  | Q606  | L-5* |       |      |
| IC417 | J-1  | Q607  | K-5* |       |      |
| IC418 | L-2  | Q616  | N-3  |       |      |
| IC420 | H-4  |       |      |       |      |
| IC421 | H-2  | RV1   | B-4  |       |      |

\* mark ; B SIDE mount

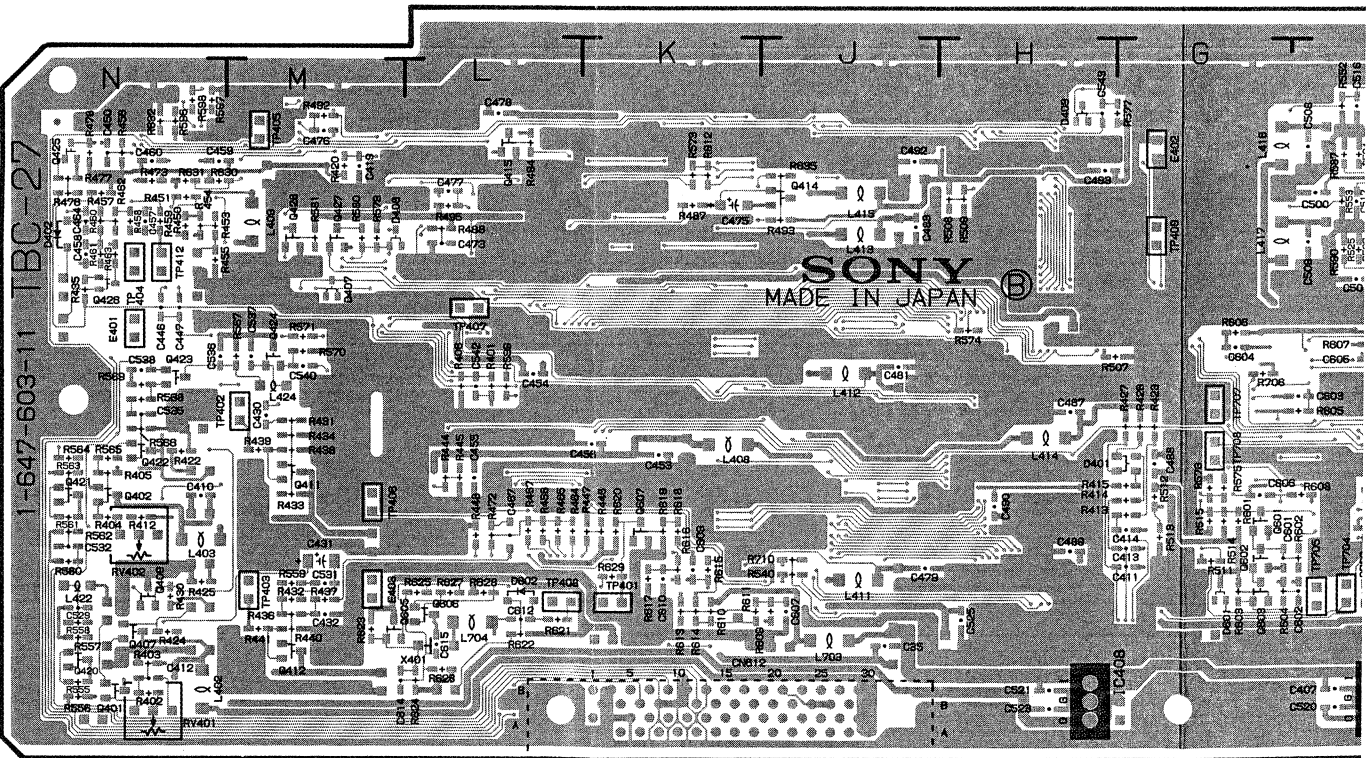
**TBC-27 BOARD**  
**A Side**



1-642-603-11 A SIDE

A Side is the same as Component Side

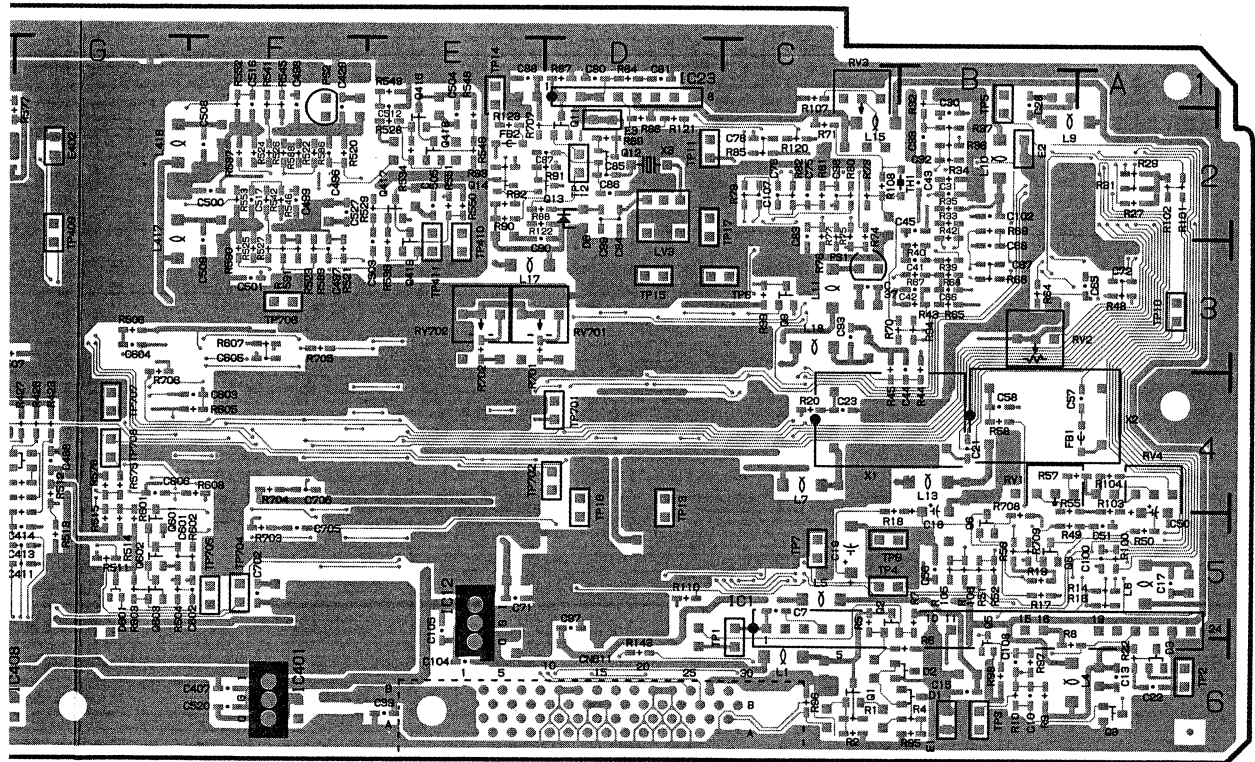
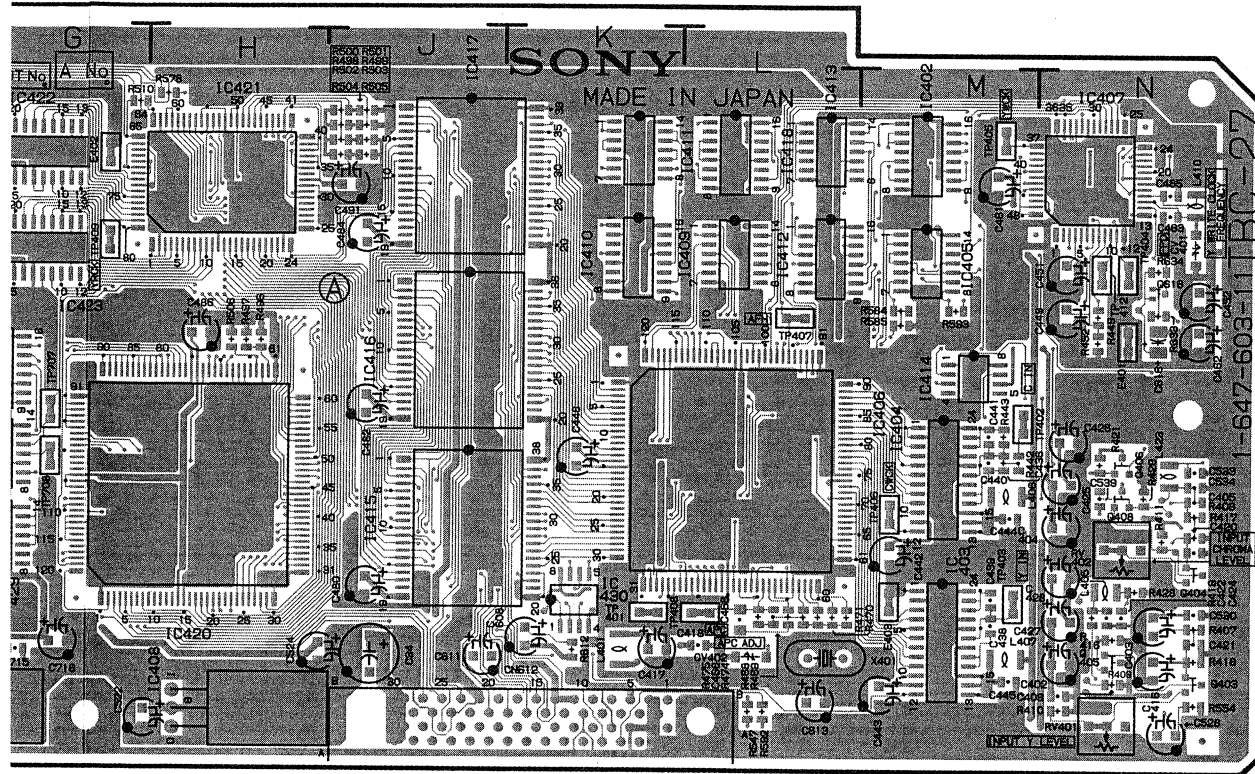
**TBC-27 BOARD**  
**B Side**



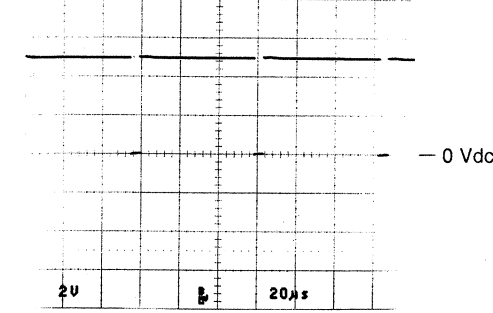
1-642-603-11 B SIDE

B Side is the same as Soldering Side

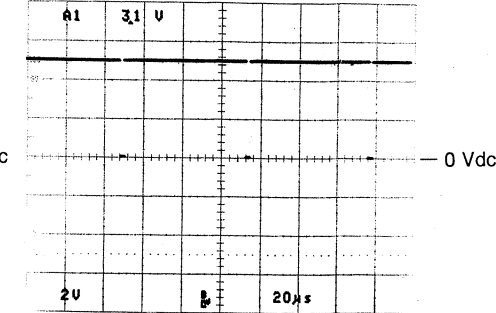




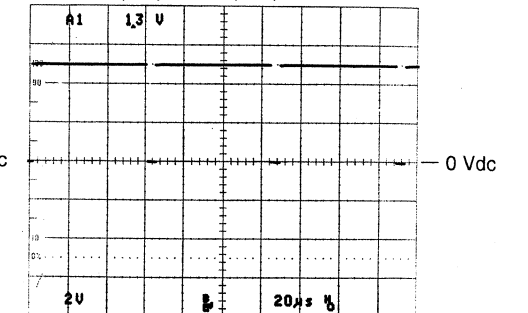
① TP6 (D-3) STOP (E-E) mode



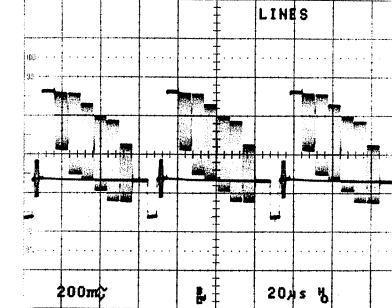
⑤ TP15 (D-3) STOP (E-E) mode



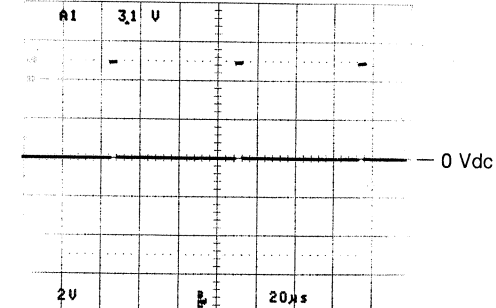
⑨ TP13 (D-4) STOP (E-E) mode



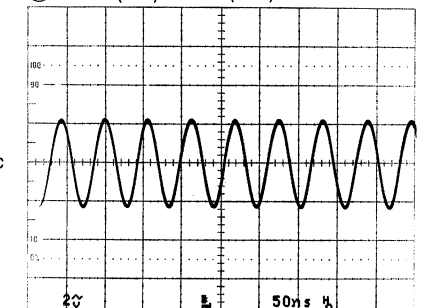
② TP1 (C-6) STOP (E-E) mode



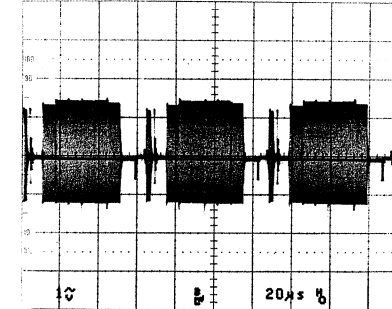
⑥ TP5 (B-1) STOP (E-E) mode



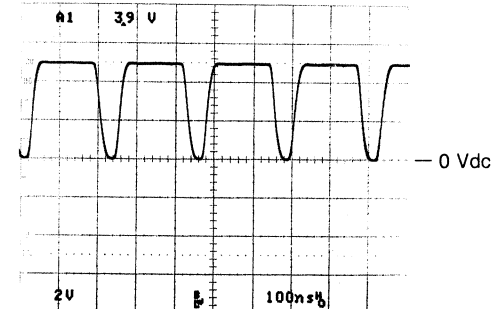
⑩ TP14 (E-1) STOP (E-E) mode



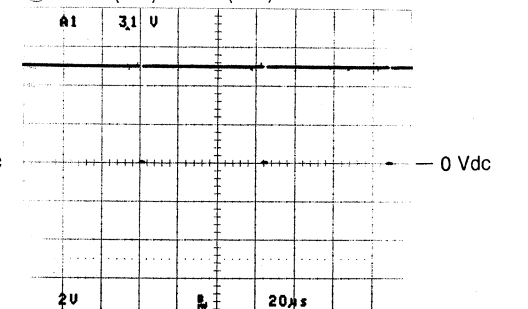
③ TP2 (A-6) STOP (E-E) mode



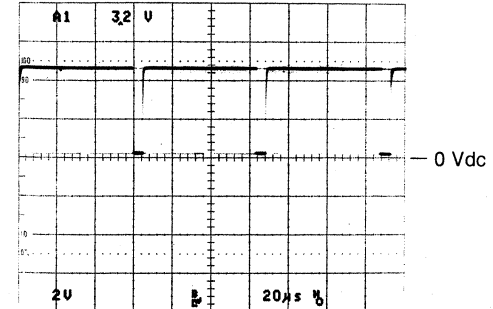
⑦ TP11 (D-2) STOP (E-E) mode



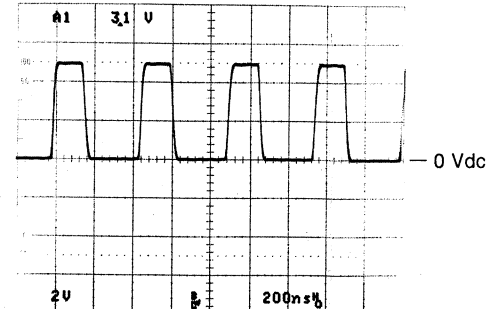
⑪ TP16 (D-4) STOP (E-E) mode



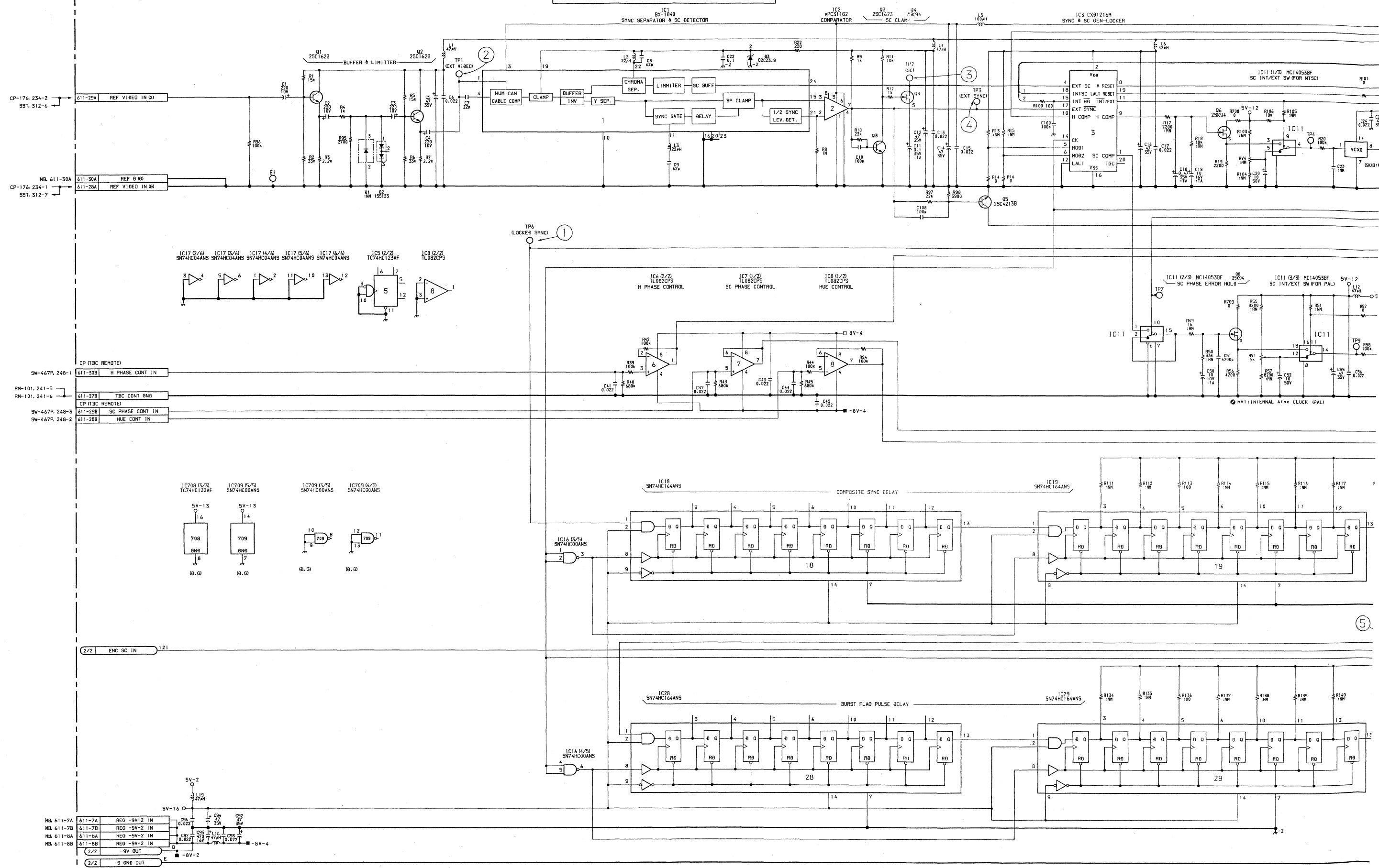
④ TP3 (B-6) STOP (E-E) mode

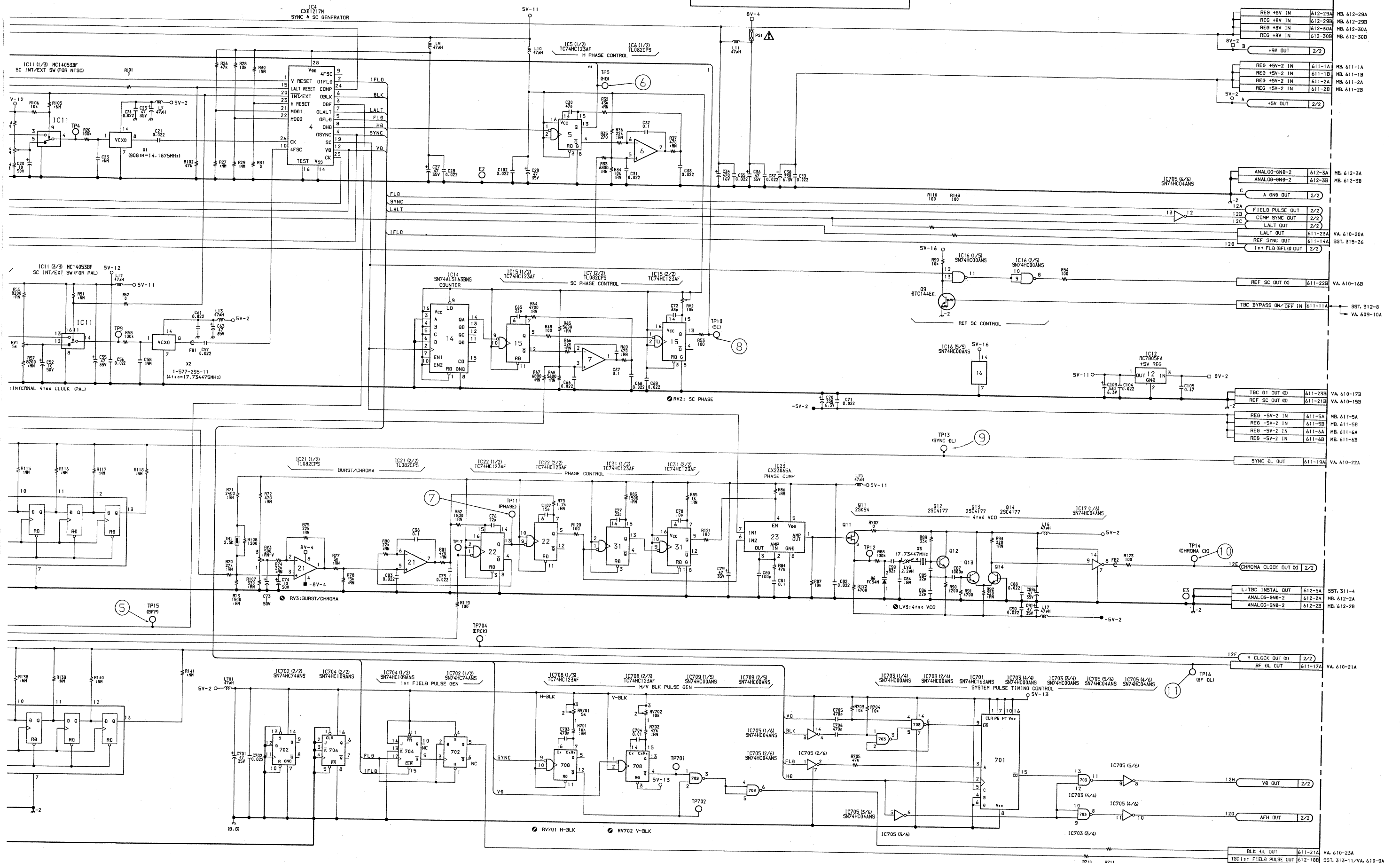


⑧ TP10 (A-3) STOP (E-E) mode



Measurement Condition  
VIDEO IN: EBU color-bars  
STOP (E-E) mode





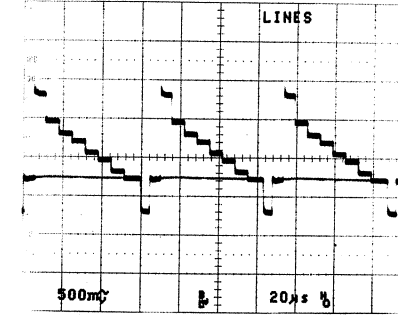
SYNC & SC Generator

TBC-27 BOARD (1/2)

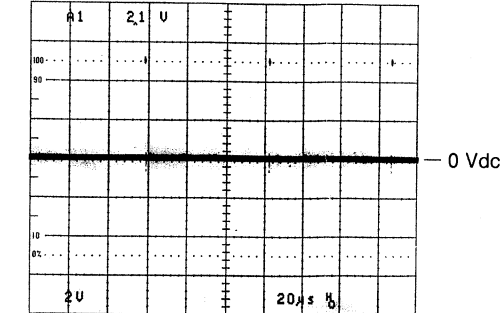
BOARD NO. 1-647-603-11

EVO-9850P (EK) : #10001-

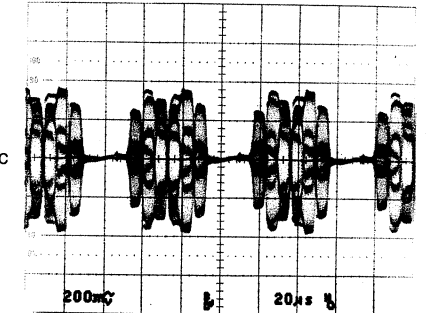
① TP403 (M-5) PB mode



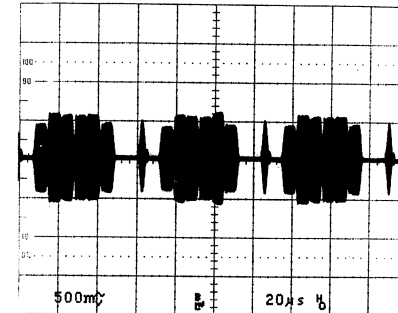
⑤ TP407 (L-3) STOP (E-E) mode



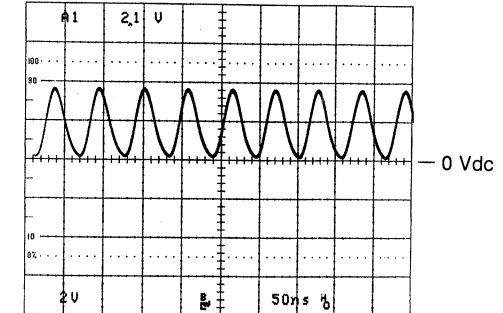
⑨ TP411 (E-3) PB mode



② TP402 (M-4) PB mode

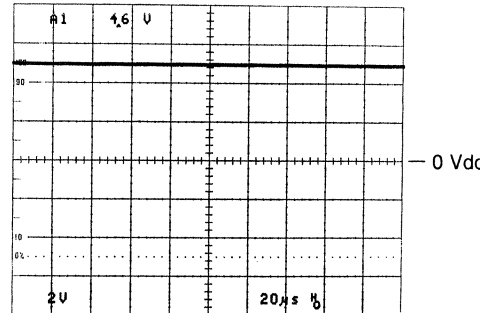


⑥ TP406 (M-4) STOP (E-E) mode

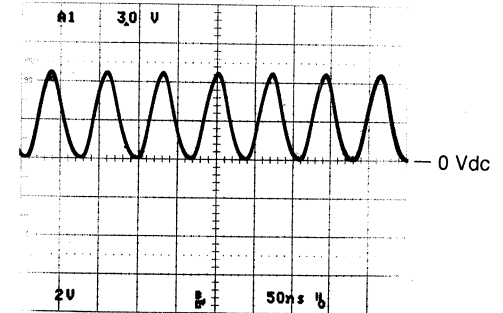


**Measurement Condition**  
VIDEO IN: EBU color-bars  
PB mode: (WR5-8CSE: color bars)  
STOP (E-E) mode

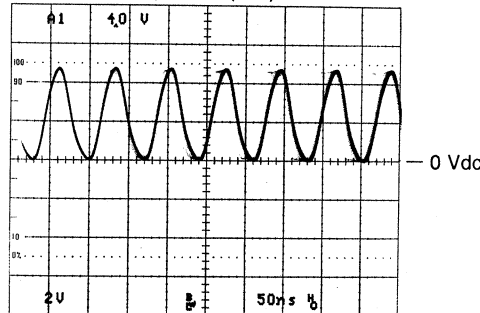
③ TP404 (N-3) STOP (E-E) mode



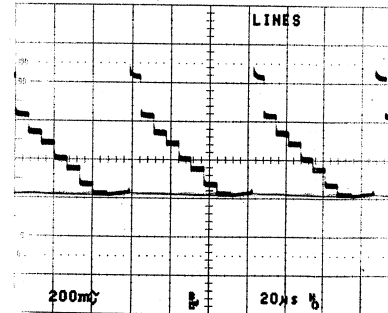
⑦ TP409 (G-2) STOP (E-E) mode



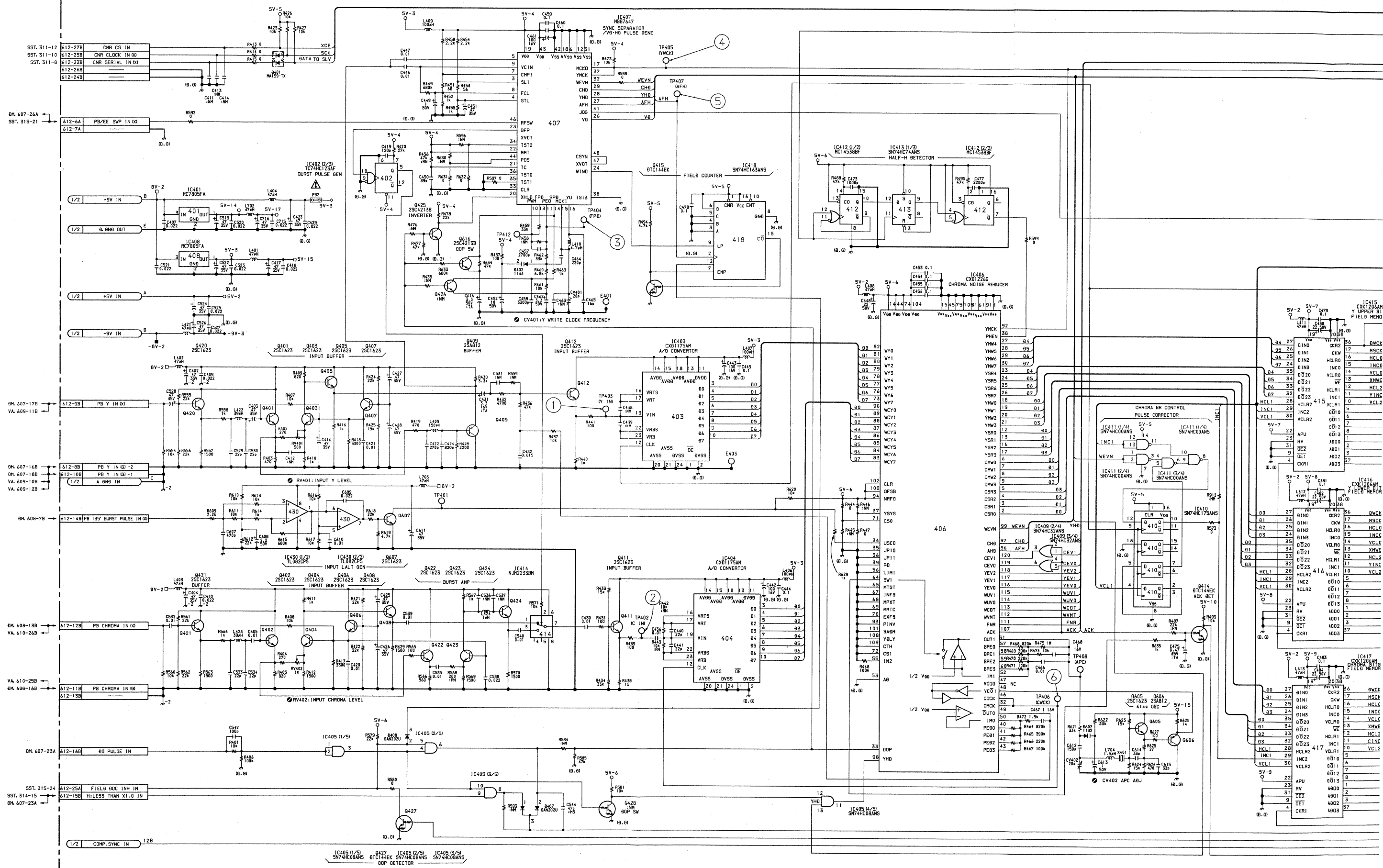
④ TP405 (M-2) STOP (E-E) mode

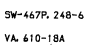


⑧ TP410 (E-3) PB mode



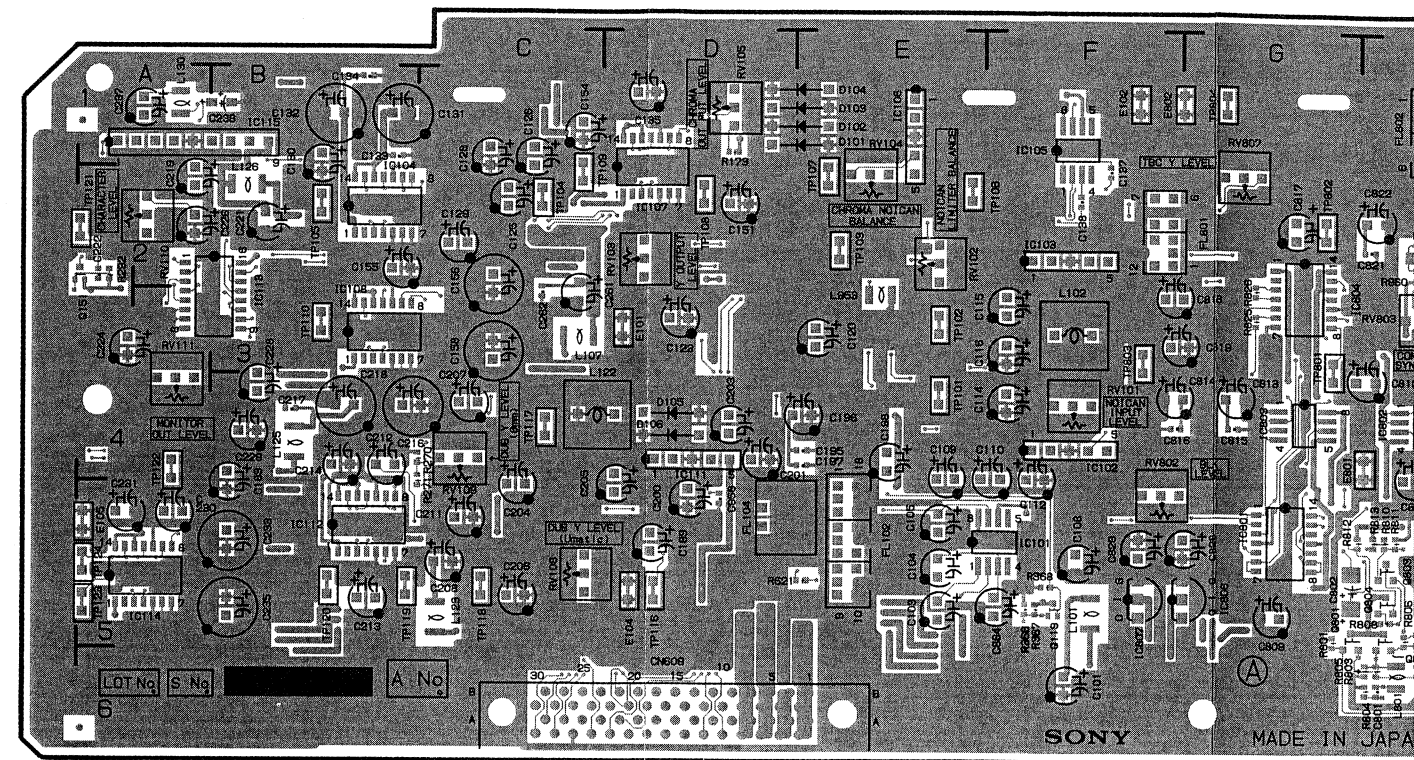








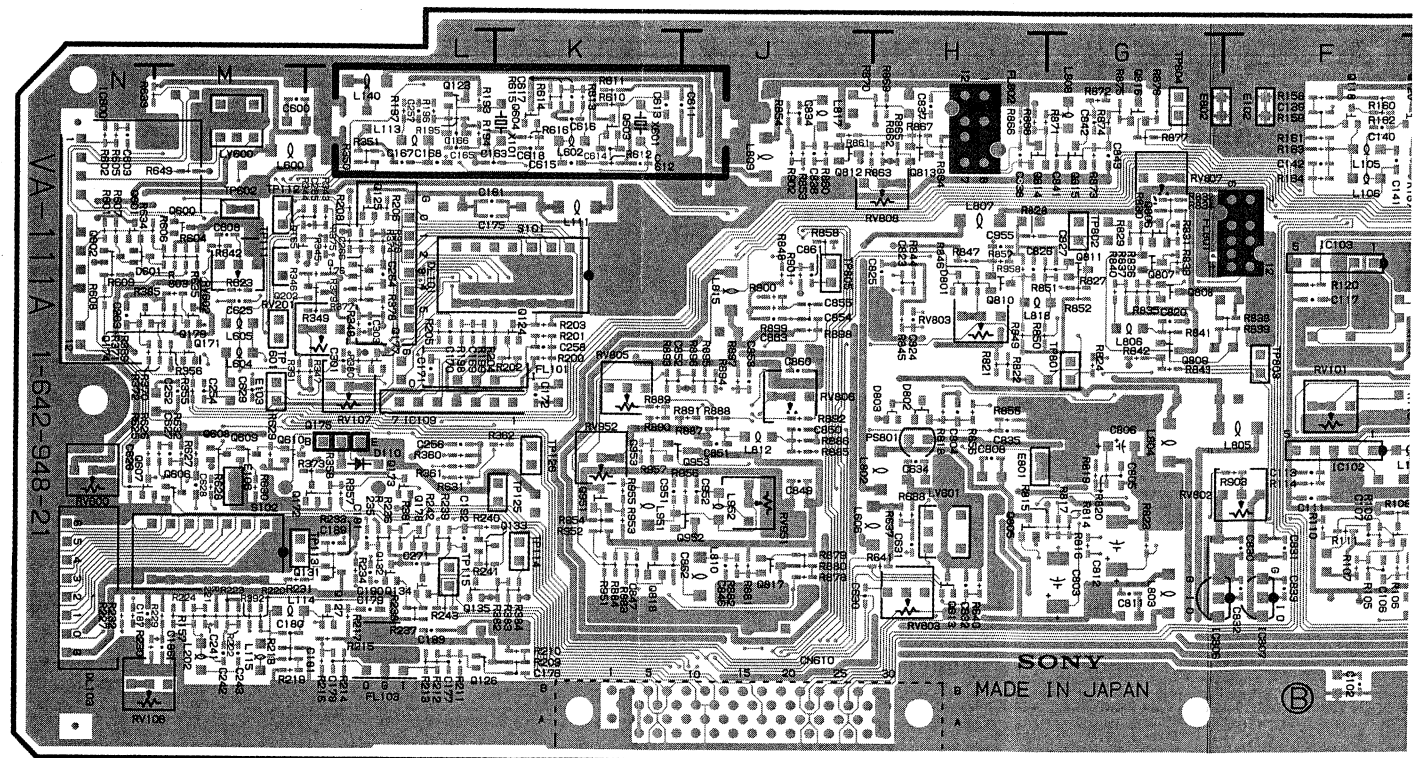
**VA-111AP BOARD**  
A Side



1-642-948-21 A SIDE

A Side is the same as Component Side

**VA-111AP BOARD**  
B Side



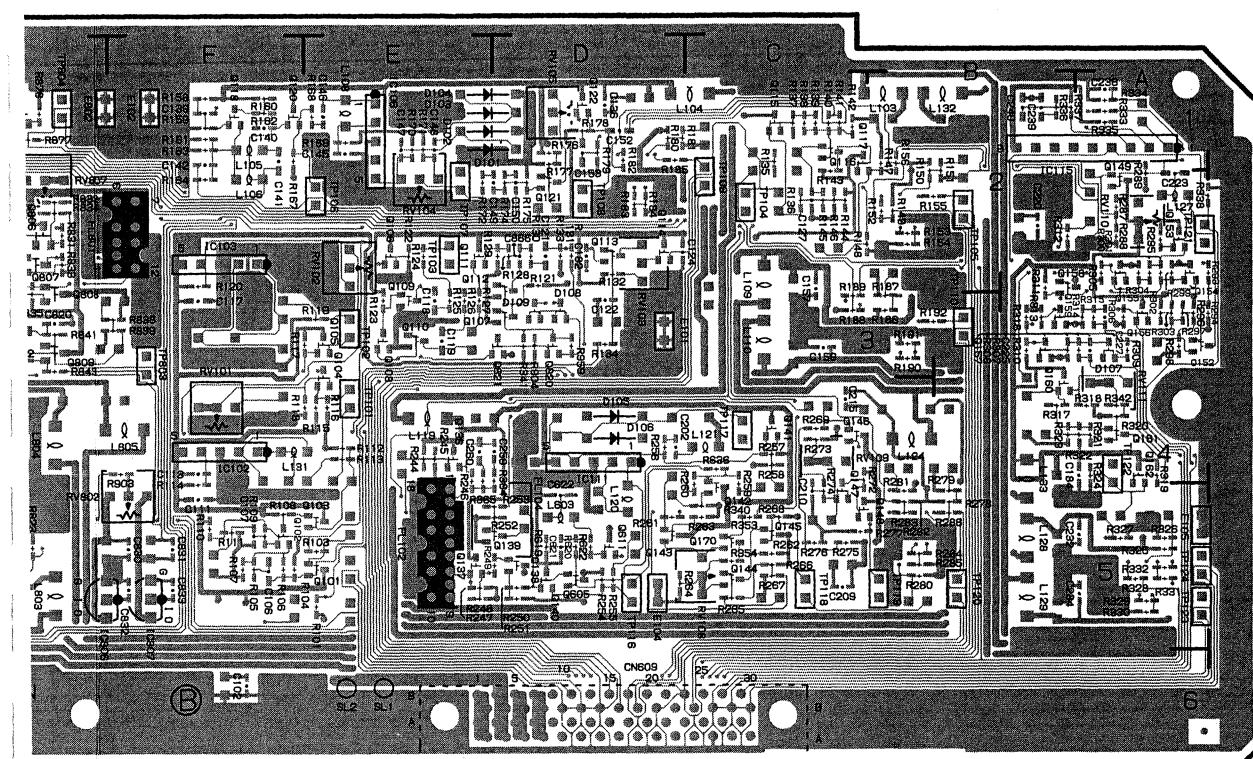
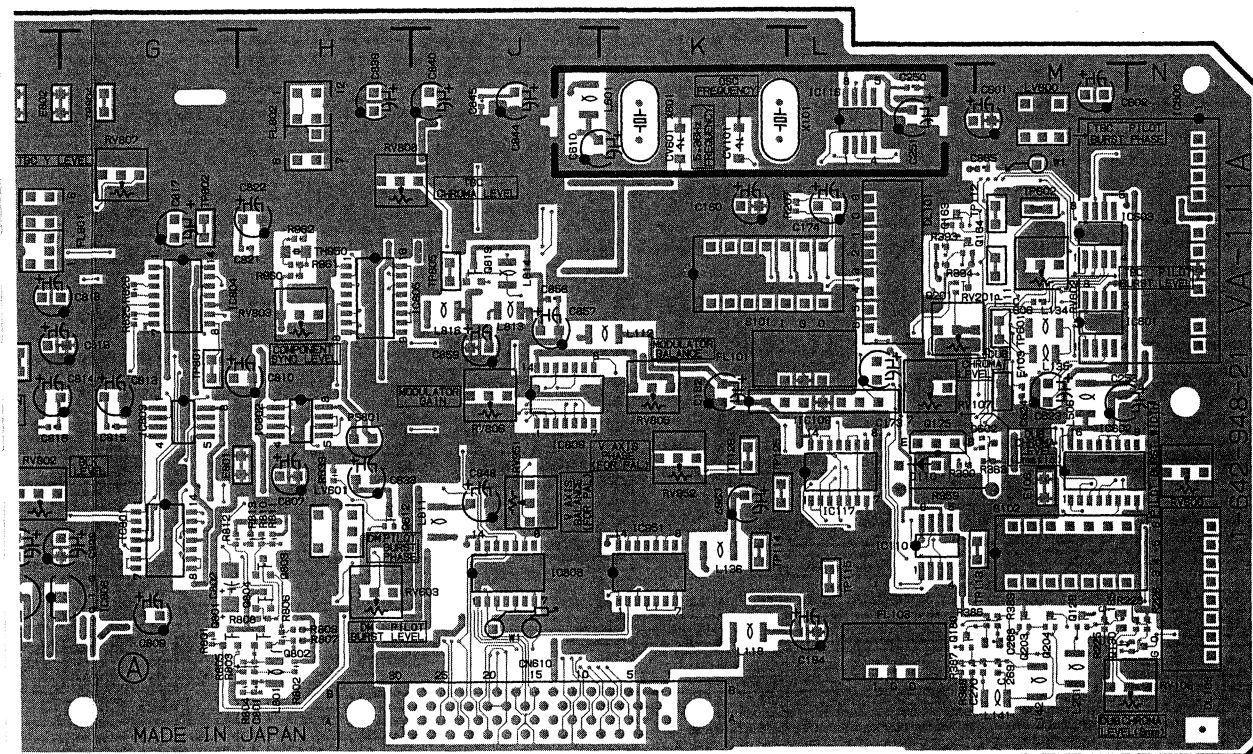
1-642-948-21 B SIDE

B Side is the same as Soldering Side

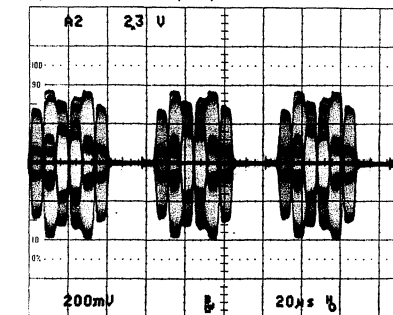
VA-111AP (1-642-948-21)

|       |      |       |      |       |      |       |     |
|-------|------|-------|------|-------|------|-------|-----|
| CN609 | D-6  | IC809 | J-4  | Q173  | L-5* | RV808 | H-2 |
| CN610 | J-6  | IC951 | K-5  | Q174  | N-3* | RV951 | J-5 |
|       |      |       |      | Q175  | L-4  | RV952 | K-4 |
| CV101 | K-1  | LV600 | M-1  | Q176  | L-2* |       |     |
| CV601 | K-1  | LV601 | H-5  | Q177  | L-3* | S101  | K-2 |
|       |      |       |      | Q178  | L-5* | S102  | M-5 |
| D101  | E-1  | PS801 | H-4  | Q179  | M-3* |       |     |
| D102  | E-1  |       |      | Q180  | L-5  | TP101 | E-4 |
| D103  | E-1  | Q101  | E-5* | Q201  | L-2  | TP102 | E-3 |
| D104  | E-1  | Q102  | F-5* | Q202  | L-3* | TP103 | E-2 |
| D105  | D-4  | Q103  | E-5* | Q203  | M-5  | TP104 | C-2 |
| D106  | D-4  | Q104  | E-3* | Q204  | M-5  | TP105 | B-2 |
| D107  | A-3* | Q105  | E-3* | Q600  | M-2* | TP106 | E-2 |
| D108  | D-3* | Q106  | E-2* | Q601  | N-2* | TP107 | E-2 |
| D110  | L-4  | Q107  | D-3* | Q602  | N-2* | TP108 | D-2 |
| D601  | N-2* | Q111  | E-2* | Q603  | K-1* | TP109 | C-2 |
| D602  | M-4  | Q112  | D-2* | Q604  | K-1* | TP110 | B-3 |
| D801  | H-2* | Q113  | D-2* | Q605  | D-5* | TP111 | M-2 |
| D802  | H-4* | Q114  | D-2* | Q606  | M-5* | TP112 | M-2 |
| D803  | H-4* | Q115  | C-1* | Q607  | N-5* | TP113 | M-5 |
|       |      | Q116  | C-1* | Q608  | M-4* | TP114 | K-5 |
| DL101 | L-2  | Q117  | C-1* | Q609  | M-4* | TP115 | L-5 |
| DL103 | N-5  | Q118  | F-1* | Q610  | M-4* | TP116 | D-5 |
|       |      | Q119  | F-5  | Q611  | D-5* | TP117 | C-4 |
| E101  | D-3  | Q120  | F-1* | Q612  | H-5  | TP118 | C-5 |
| E102  | F-1  | Q121  | D-2* | Q613  | H-5* | TP119 | B-5 |
| E103  | M-4  | Q122  | D-1* | Q801  | G-5  | TP120 | B-5 |
| E104  | D-5  | Q123  | L-1* | Q802  | H-5  | TP121 | A-2 |
| E105  | A-5  | Q124  | K-3* | Q803  | H-5  | TP122 | A-4 |
| E106  | M-5  | Q125  | L-2* | Q804  | H-5  | TP123 | A-5 |
| E801  | H-4  | Q126  | L-6* | Q805  | H-5* | TP124 | A-5 |
| E802  | G-1  | Q127  | L-5* | Q806  | G-2* | TP125 | K-5 |
|       |      | Q129  | M-5  | Q807  | G-2* | TP126 | K-4 |
| FL101 | L-4  | Q130  | N-5  | Q808  | G-2* | TP601 | M-3 |
| FL102 | E-5  | Q131  | L-5* | Q809  | G-3* | TP602 | M-2 |
| FL103 | L-6  | Q132  | L-5* | Q810  | H-2* | TP801 | G-3 |
| FL104 | D-5  | Q133  | L-5* | Q811  | G-2* | TP802 | G-2 |
| FL801 | F-2  | Q134  | L-5* | Q812  | J-1* | TP803 | F-3 |
| FL802 | H-1  | Q135  | L-5* | Q813  | H-1* | TP804 | G-1 |
|       |      | Q136  | E-4* | Q814  | H-1* | TP805 | J-2 |
| IC101 | E-5  | Q138  | D-5* | Q815  | G-1* |       |     |
| IC102 | F-4  | Q139  | D-5* | Q816  | G-1* | X101  | K-1 |
| IC103 | F-2  | Q141  | C-4* | Q817  | J-5* | X601  | K-1 |
| IC104 | B-2  | Q142  | C-5* | Q818  | K-5* |       |     |
| IC105 | F-2  | Q143  | D-5* | Q819  | J-2  |       |     |
| IC106 | E-1  | Q144  | C-5* | Q951  | K-5* |       |     |
| IC107 | D-2  | Q145  | C-5* | Q952  | J-5* |       |     |
| IC108 | B-3  | Q146  | C-4* | Q953  | K-4* |       |     |
| IC109 | K-4  | Q147  | C-5* |       |      |       |     |
| IC110 | L-5  | Q148  | C-5* | RV101 | F-4  |       |     |
| IC111 | D-4  | Q149  | A-2* | RV102 | E-2  |       |     |
| IC112 | B-5  | Q151  | A-2  | RV103 | D-2  |       |     |
| IC113 | A-2  | Q152  | A-3* | RV104 | E-2  |       |     |
| IC114 | A-5  | Q153  | A-2* | RV105 | D-1  |       |     |
| IC115 | A-1  | Q154  | A-2* | RV106 | N-6  |       |     |
| IC116 | L-1  | Q155  | A-2* | RV107 | L-4  |       |     |
| IC117 | L-5  | Q156  | A-3* | RV108 | C-5  |       |     |
| IC600 | N-1  | Q157  | B-3* | RV109 | C-4  |       |     |
| IC601 | M-3  | Q158  | B-2* | RV110 | A-2  |       |     |
| IC602 | M-5  | Q159  | B-3* | RV111 | A-4  |       |     |
| IC603 | M-2  | Q160  | B-4* | RV201 | L-3  |       |     |
| IC801 | G-5  | Q161  | A-4* | RV600 | N-4  |       |     |
| IC802 | H-4  | Q162  | A-4* | RV602 | H-5  |       |     |
| IC803 | G-4  | Q163  | L-2  | RV603 | H-5  |       |     |
| IC804 | G-2  | Q164  | L-2  | RV802 | F-5  |       |     |
| IC805 | H-2  | Q165  | M-2* | RV803 | H-3  |       |     |
| IC806 | G-5  | Q170  | C-5* | RV805 | K-4  |       |     |
| IC807 | F-5  | Q171  | M-3* | RV806 | J-4  |       |     |
| IC808 | J-5  | Q172  | L-5* | RV807 | G-2  |       |     |

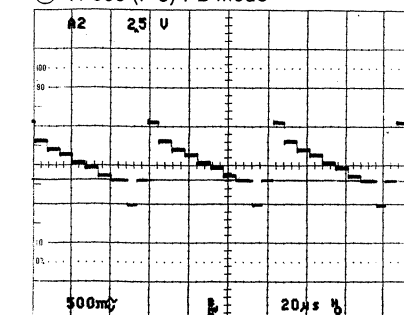
\* mark ; B SIDE mount



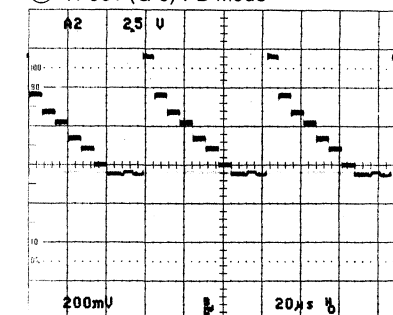
① CN610-19B (J-6) PB mode



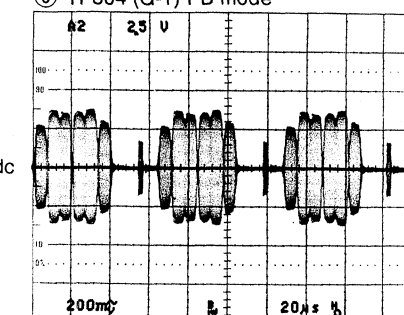
⑤ TP803 (F-3) PB mode



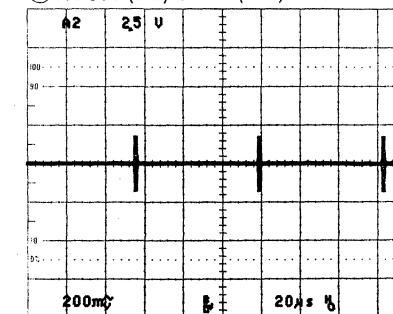
② TP801 (G-3) PB mode



⑥ TP804 (G-1) PB mode

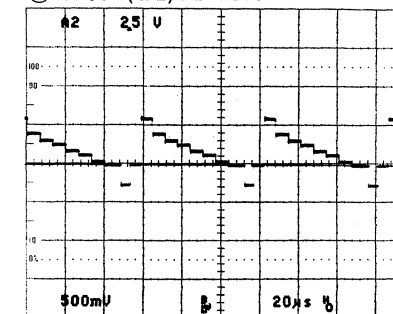


③ TP805 (J-2) STOP (E-E) mode

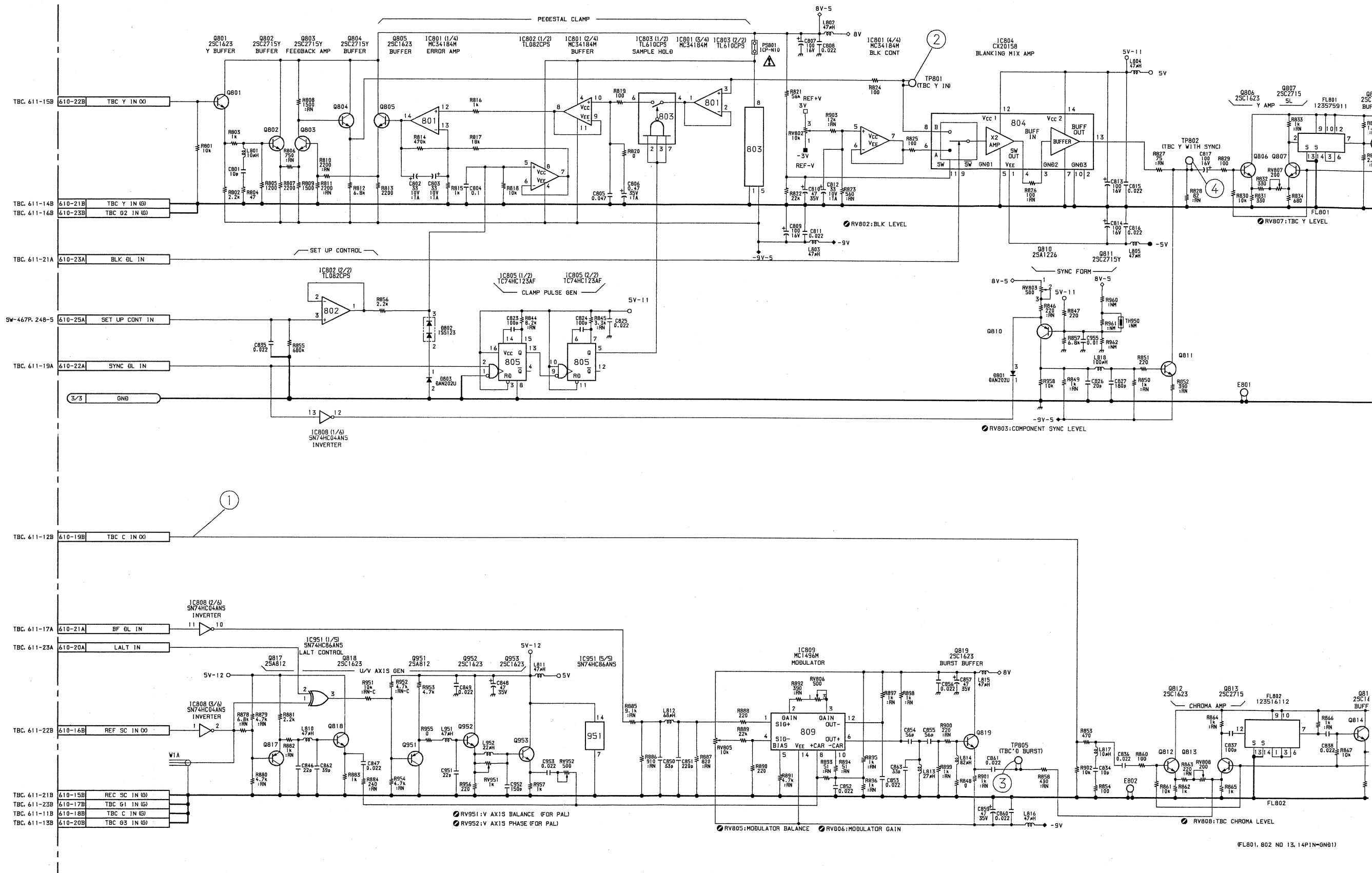


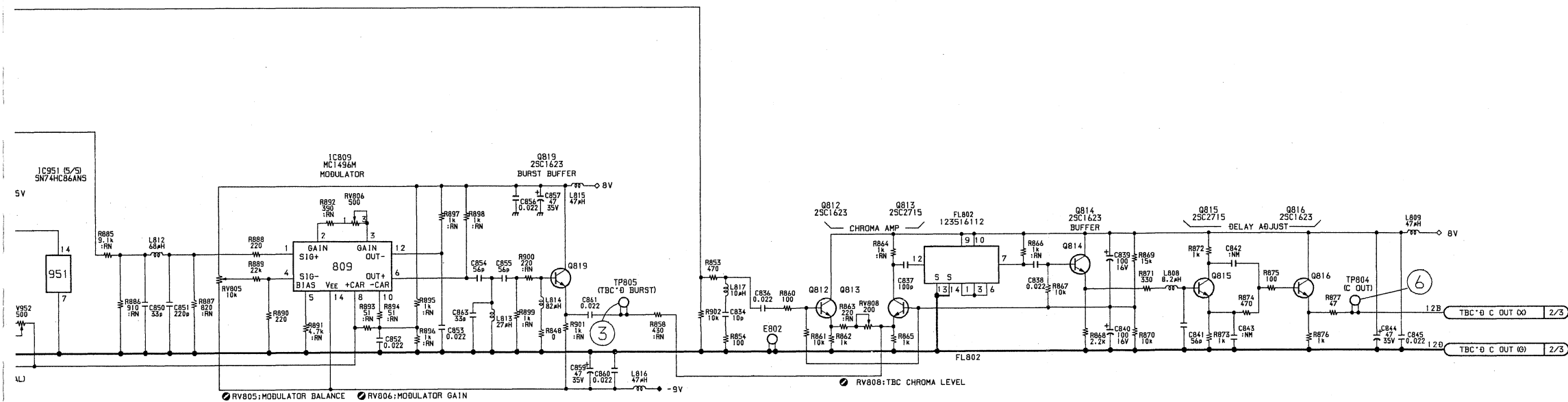
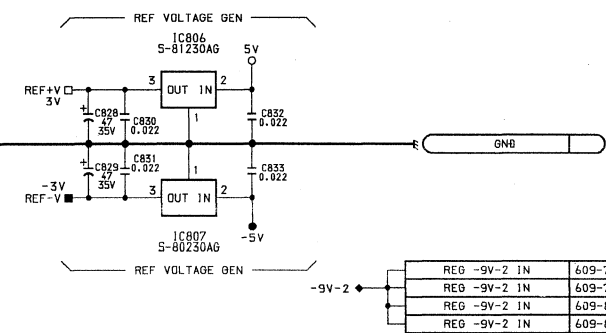
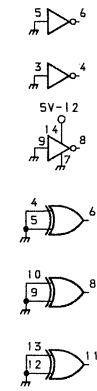
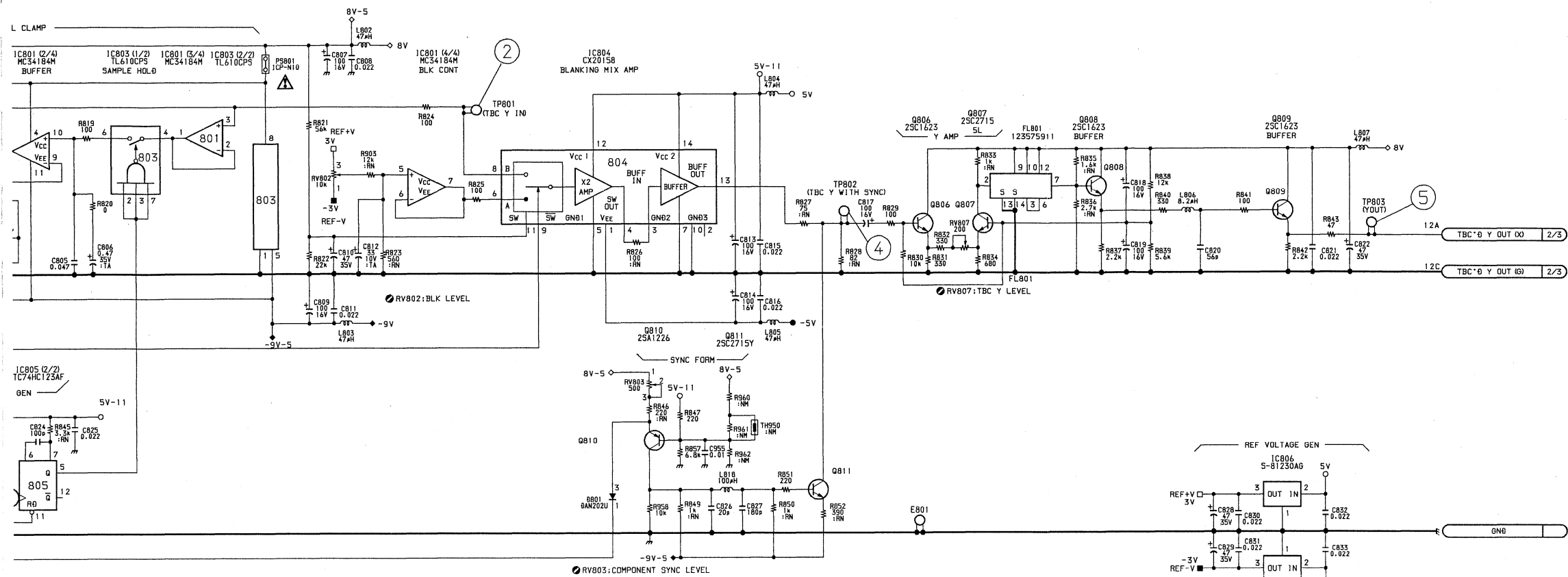
**Measurement Condition**  
VIDEO IN: EBU color-bars  
PB mode: (WR5-8CSE: color bars)  
STOP (E-E) mode

④ TP802 (G-2) PB mode



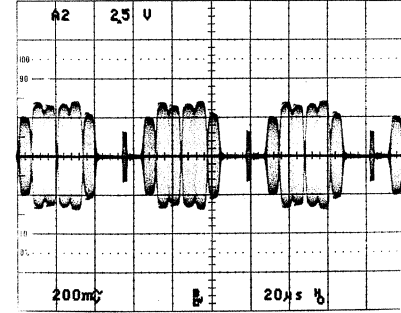




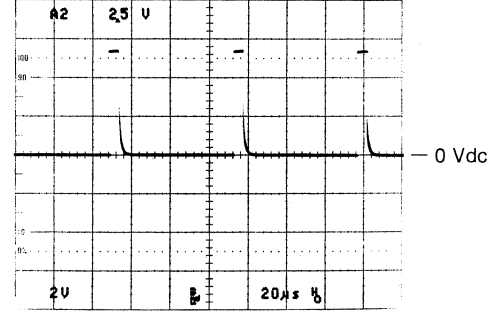


**TBC' D Y/C Separator**  
**VA-111AP BOARD (1/3)**  
 BOARD NO. 1-642-948-21  
 EVO-9850P (EK) : #10001—

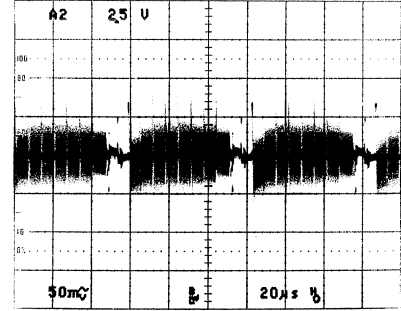
① TP106 (E-2) PB mode



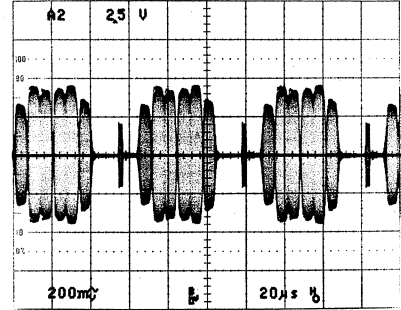
② TP121 (A-2) STOP (E-E) mode



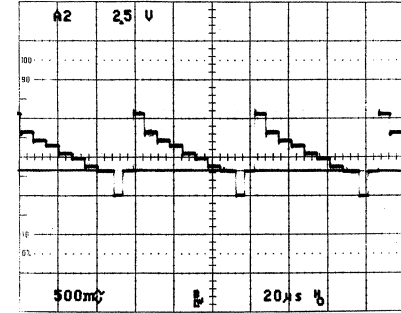
③ TP103 (E-2) PB mode



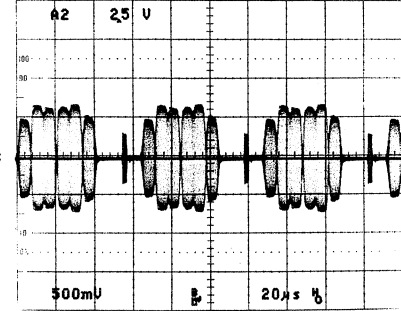
④ TP108 (D-2) PB mode



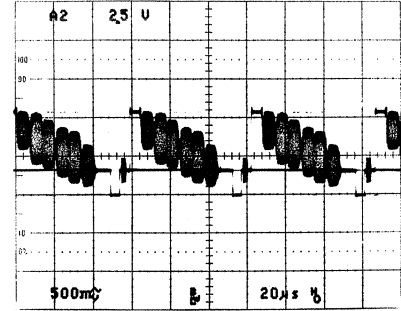
⑤ TP104 (C-2) PB mode



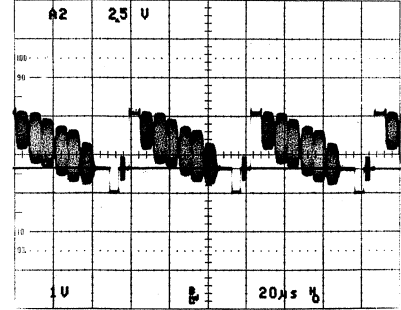
⑥ TP109 (C-2) PB mode



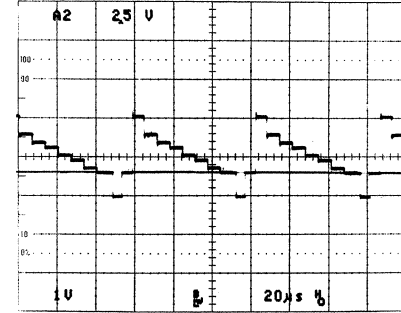
⑦ TP122 (A-4) PB mode



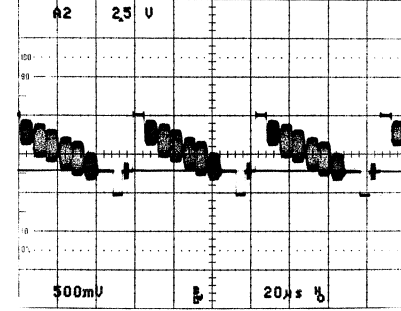
⑧ TP105 (B-2) PB mode



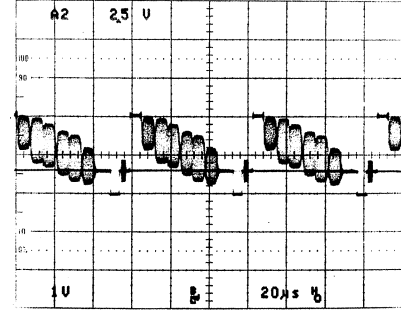
⑨ TP110 (B-3) PB mode



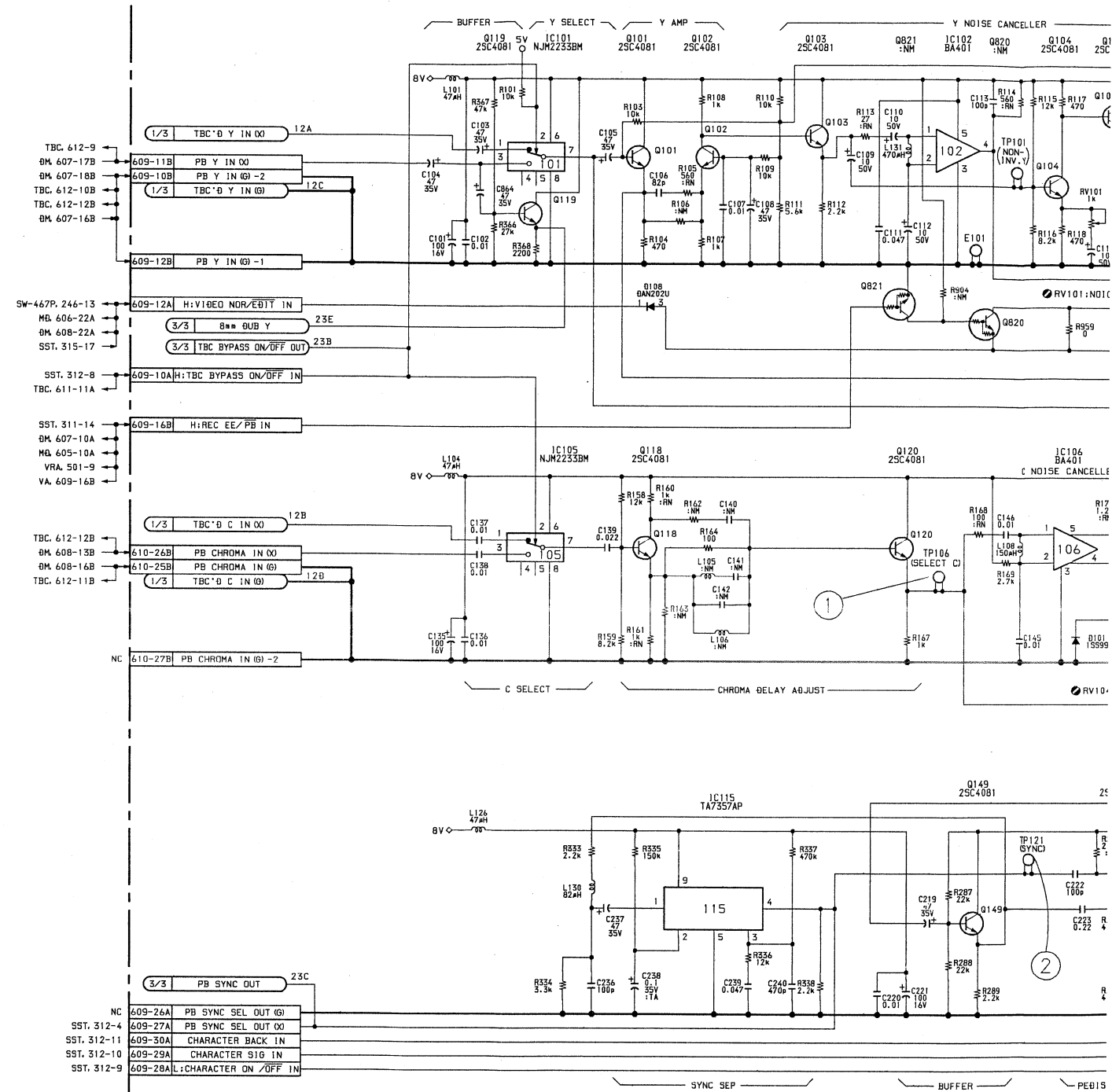
⑩ TP123 (A-5) PB mode

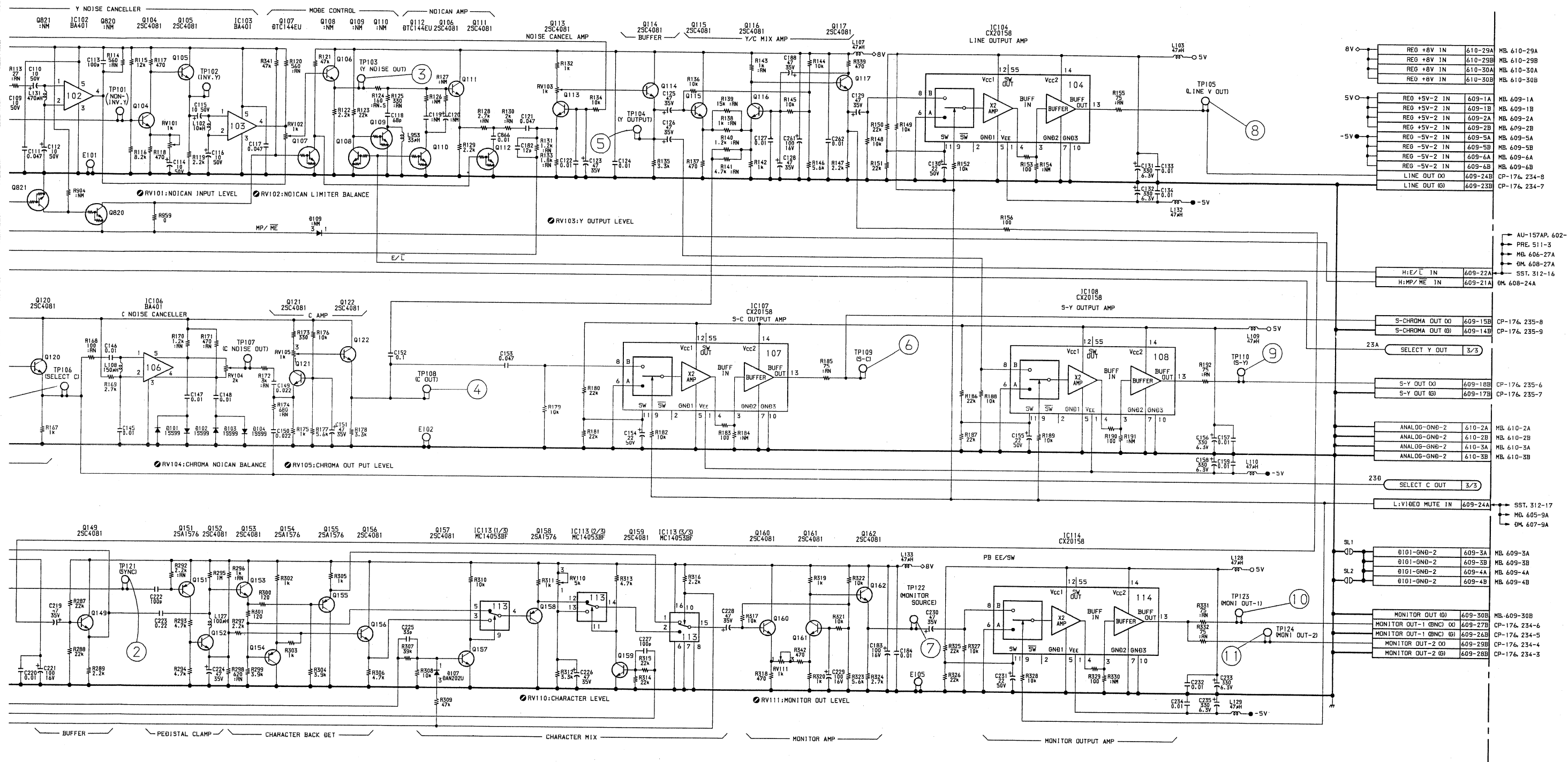


⑪ TP124 (A-5) PB mode



**Measurement Condition**  
VIDEO IN: EBU color-bars  
PB mode: (WR5-8CSE: color bars)  
STOP (E-E) mode





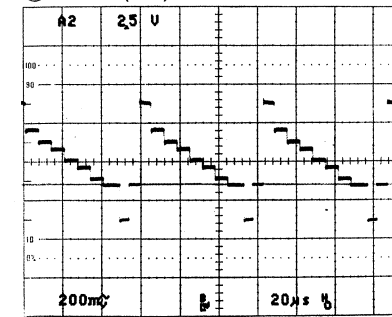
## Video Output

## VA-111AP BOARD (2/3)

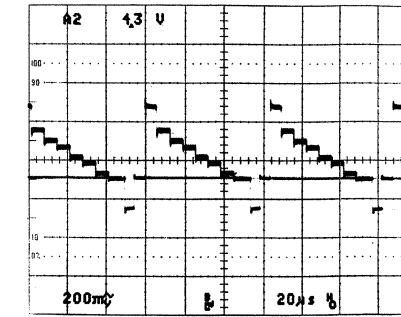
BOARD NO. 1-642-948-21

EVO-9850P (EK) : #10001 —

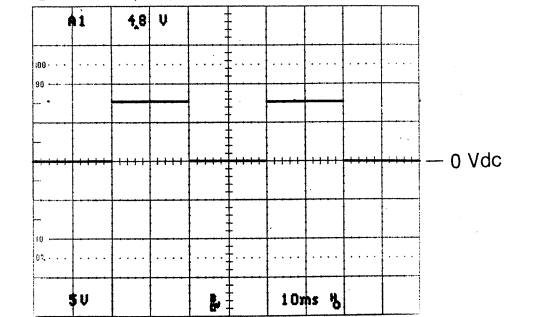
① TP116 (D-5) PB mode



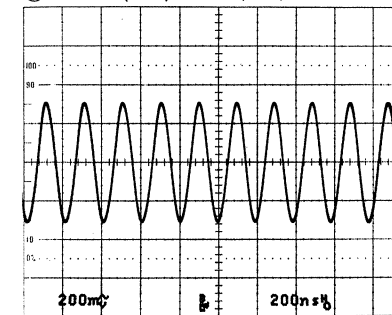
⑤ TP118 (C-5) PB mode



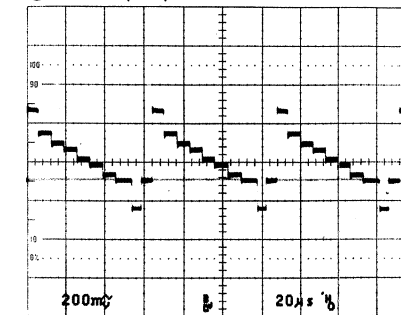
⑨ TP125 (K-5) PB mode



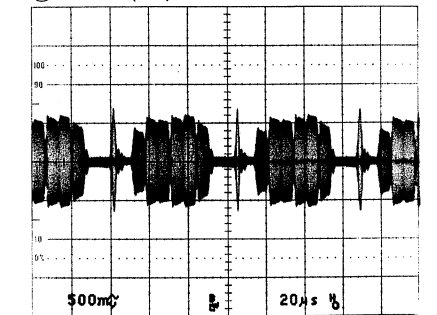
② TP111 (M-2) STOP (E-E) mode



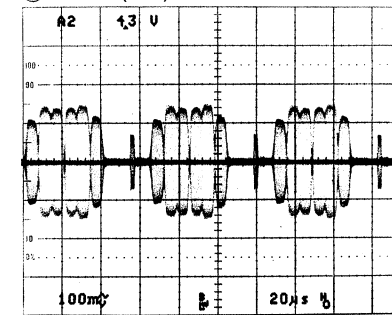
⑥ TP119 (B-5) PB mode



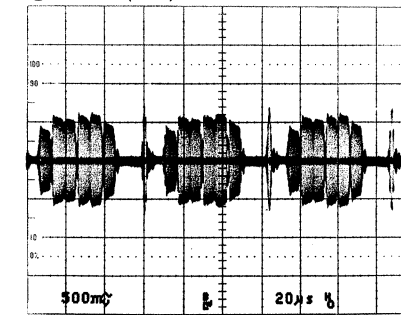
⑩ TP115 (L-5) PB mode



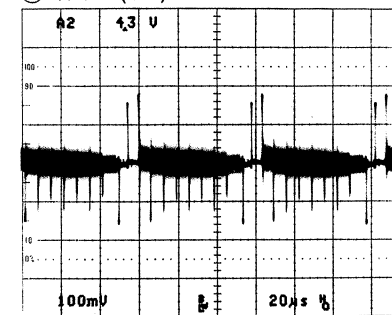
③ TP112 (M-2) PB mode



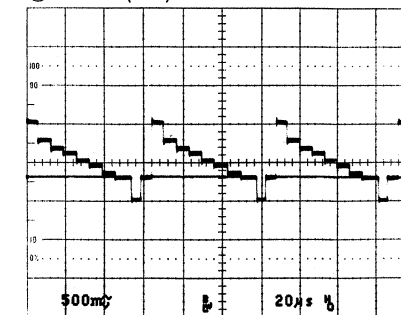
⑦ TP113 (M-5) PB mode



④ TP117 (C-4) PB mode



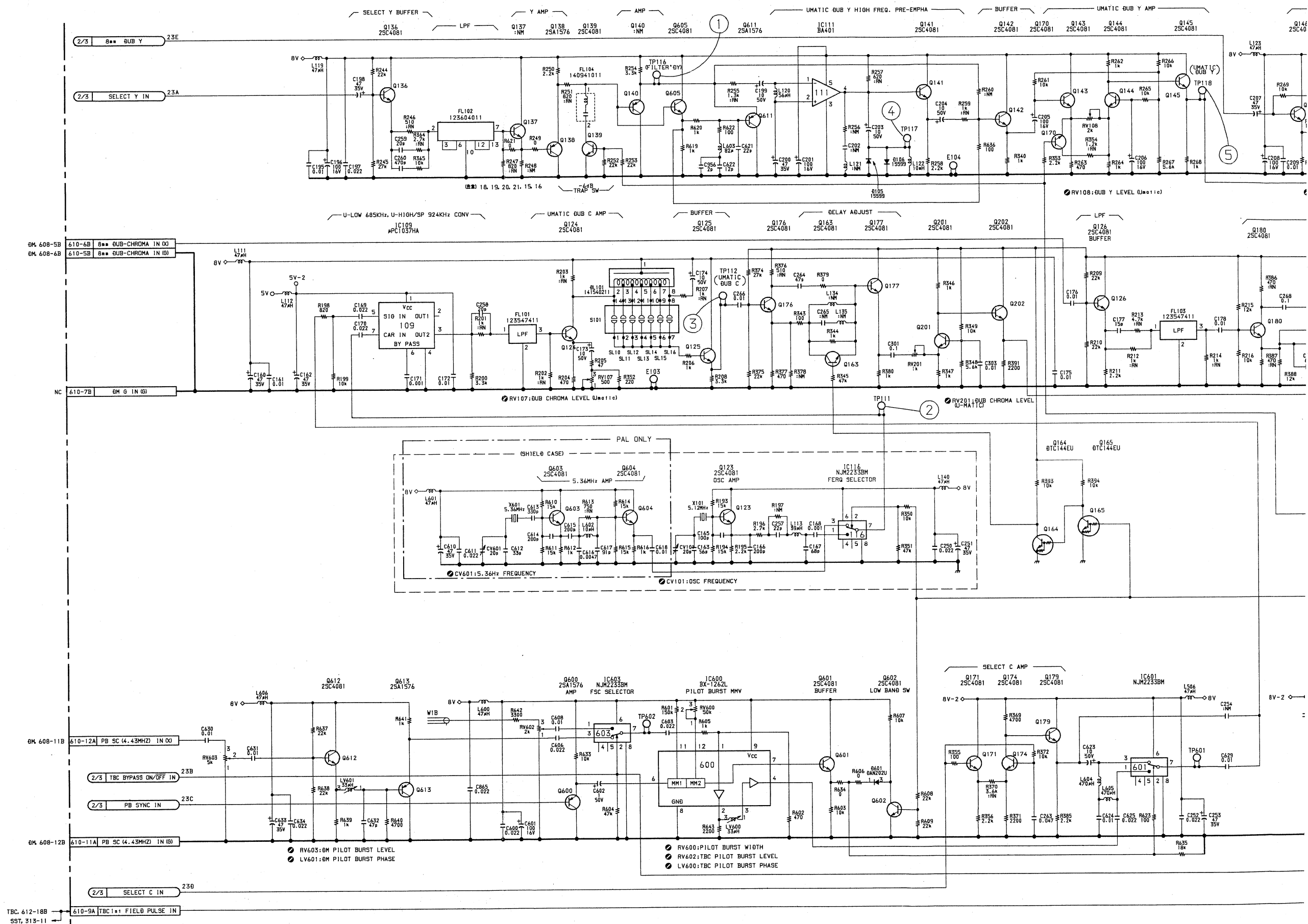
⑧ TP120 (B-5) PB mode

**Measurement Condition**

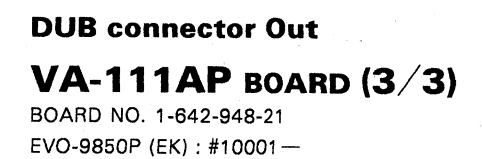
VIDEO IN: EBU color-bars

PB mode: (WR5-8CSE: color bars)

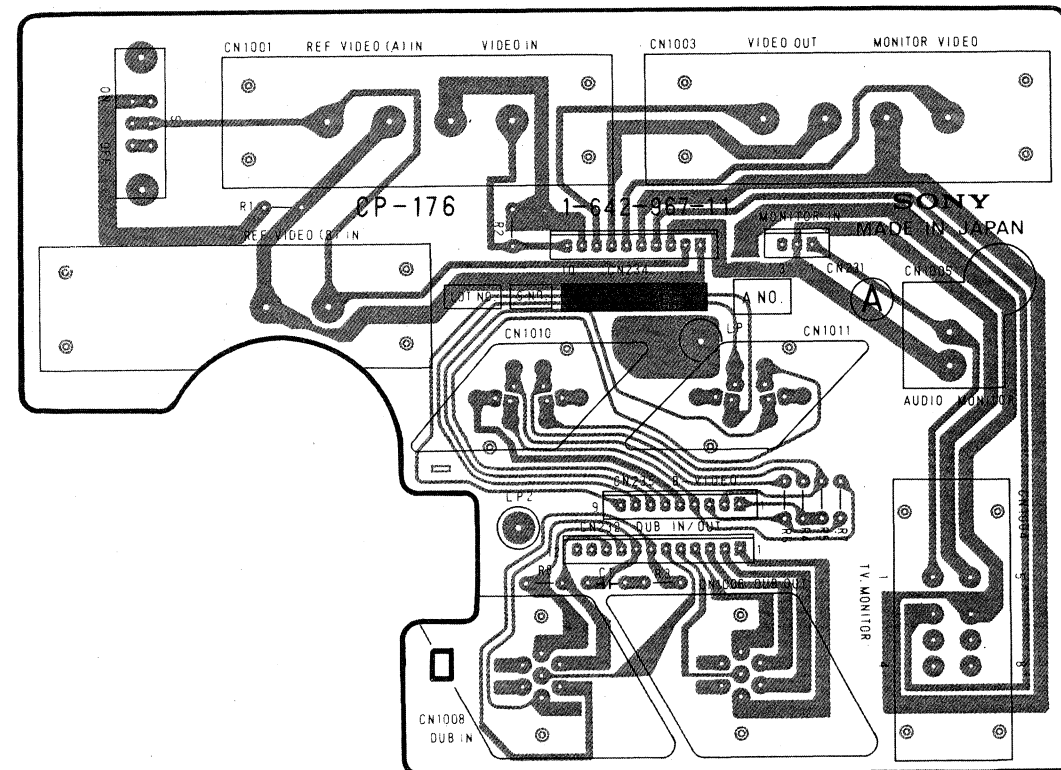
STOP (E-E) mode







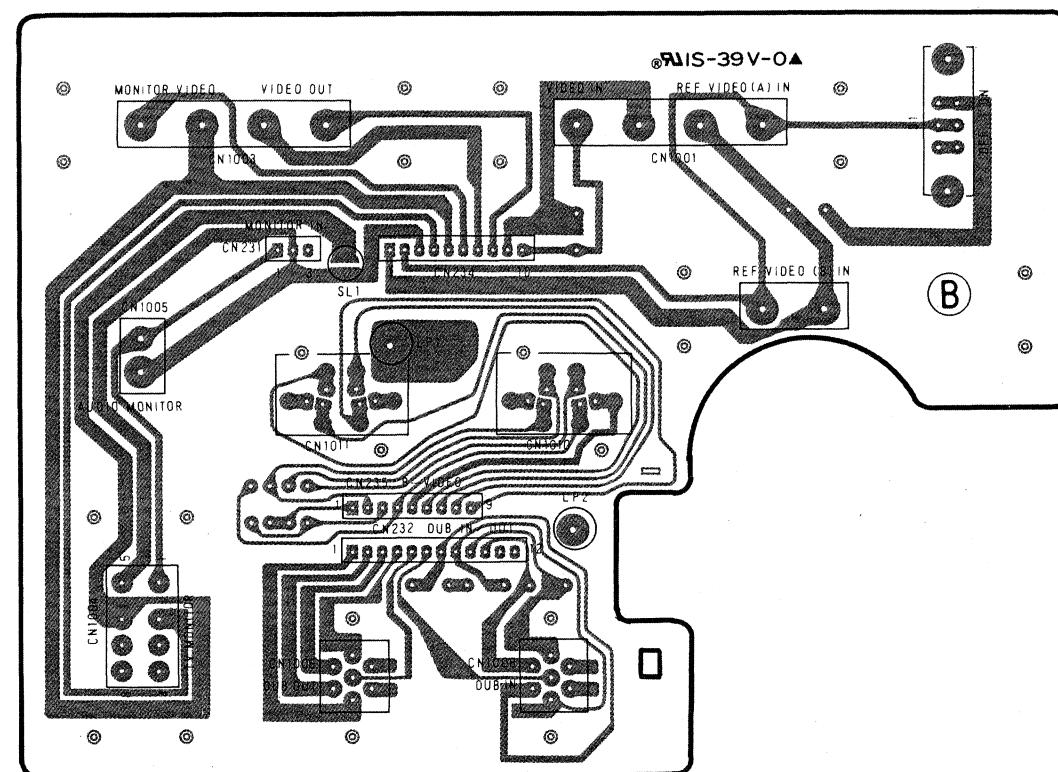
# CP-176 BOARD A Side



1-642-967-11 A SIDE

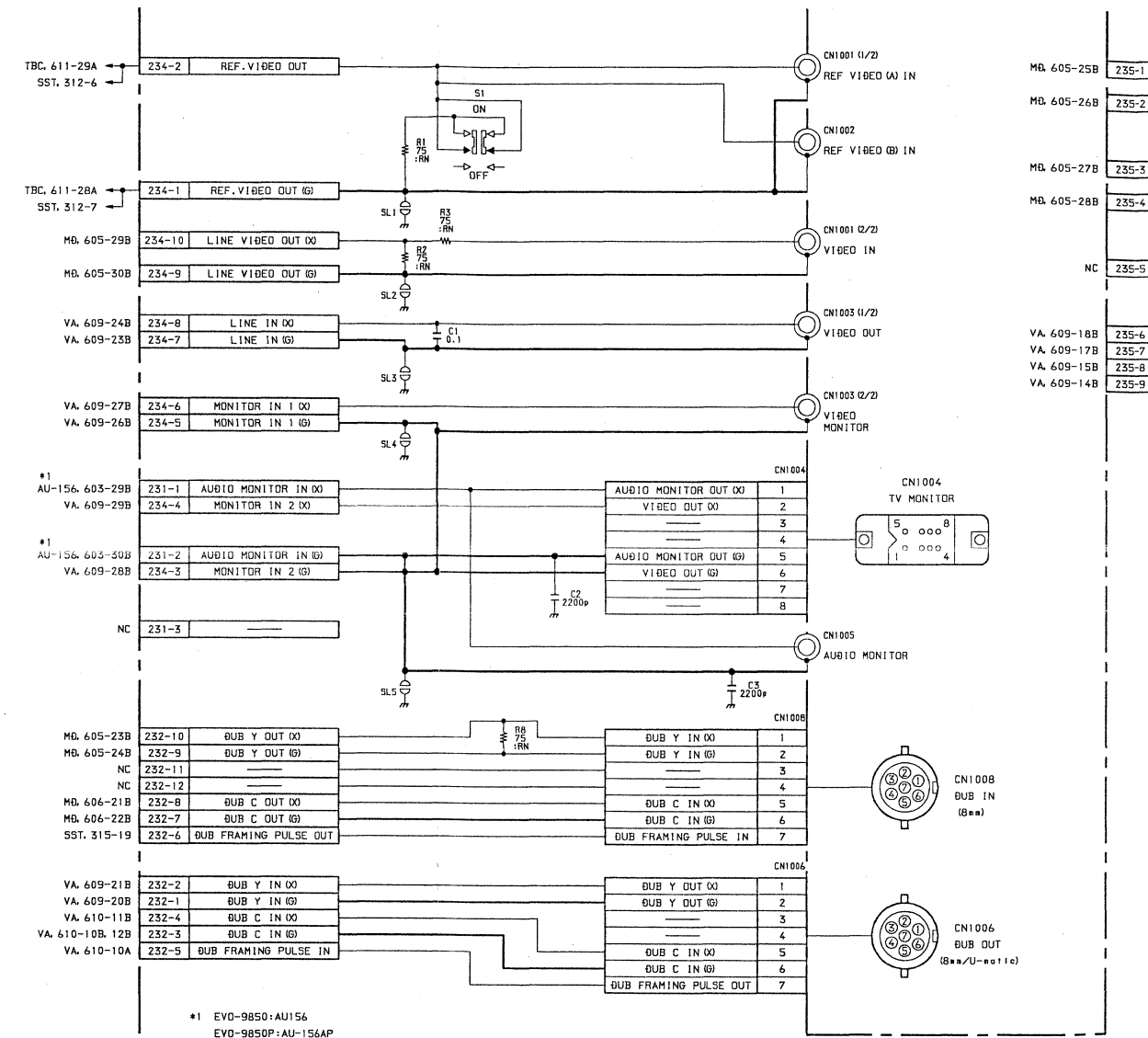
A Side is the same as Component Side

# CP-176 BOARD B Side

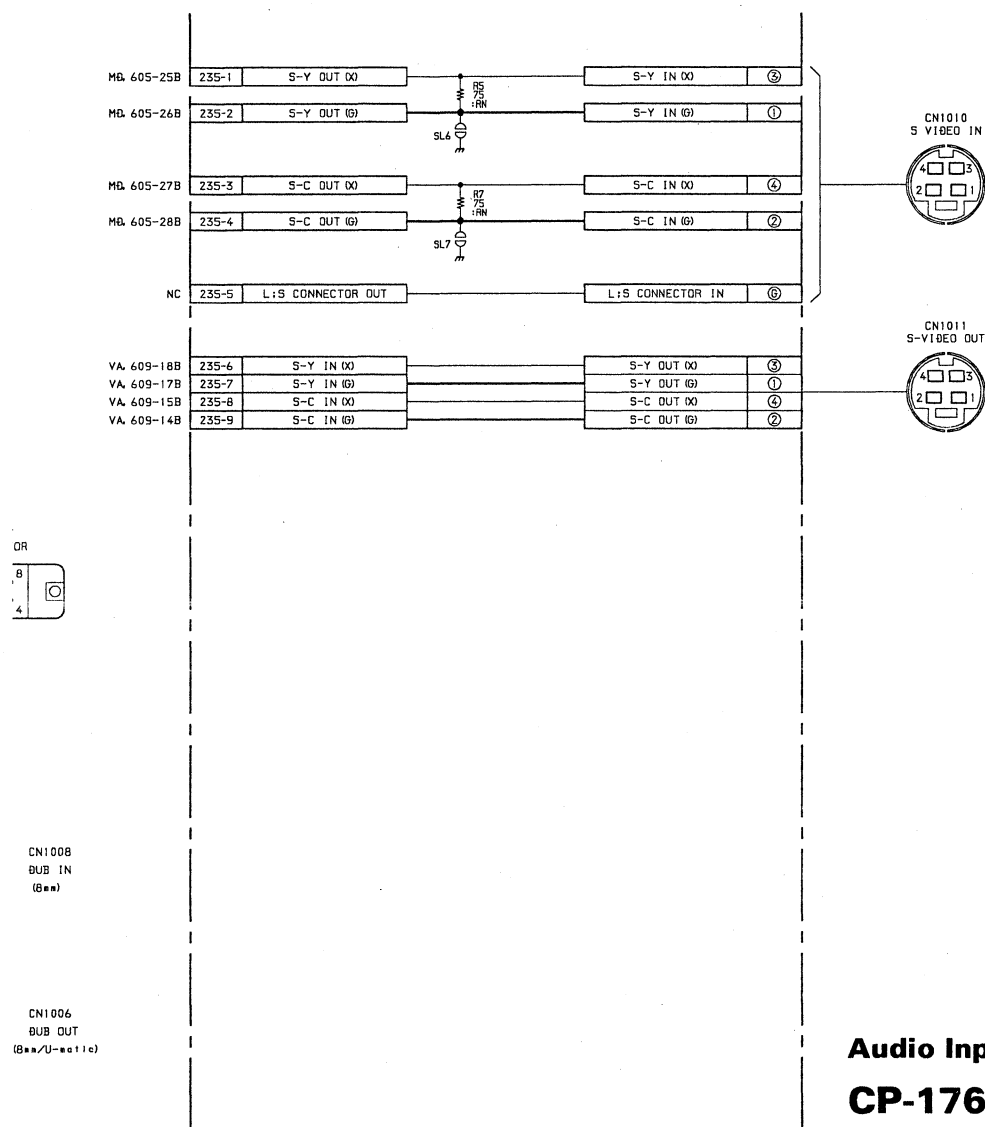


1-642-967-11 B SIDE

B Side is the same as Soldering Side

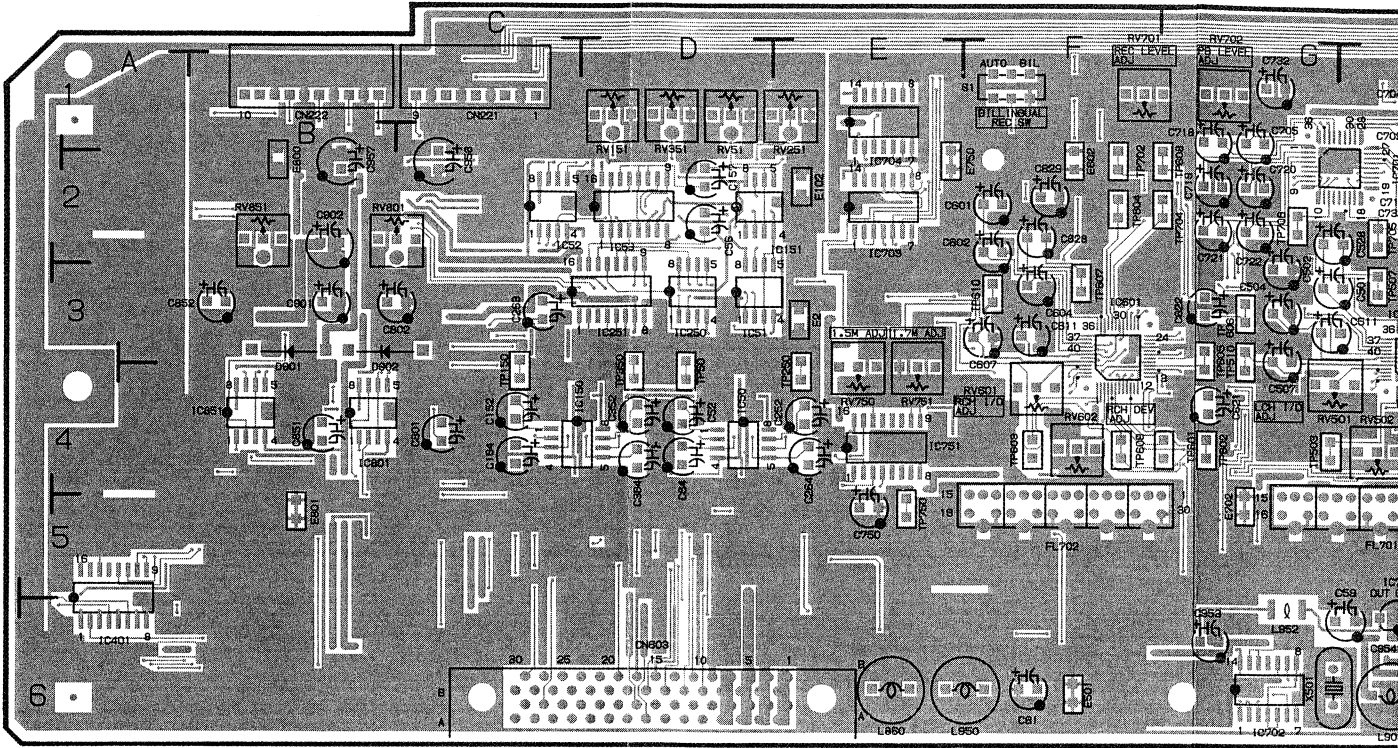


\*1 EVD-9850:AU156  
EVD-9850P:AU-156AP



**Audio Input/Output**  
**CP-176 BOARD**  
BOARD NO. 1-642-967-11  
EVO-9850P (EK) : #10001 —

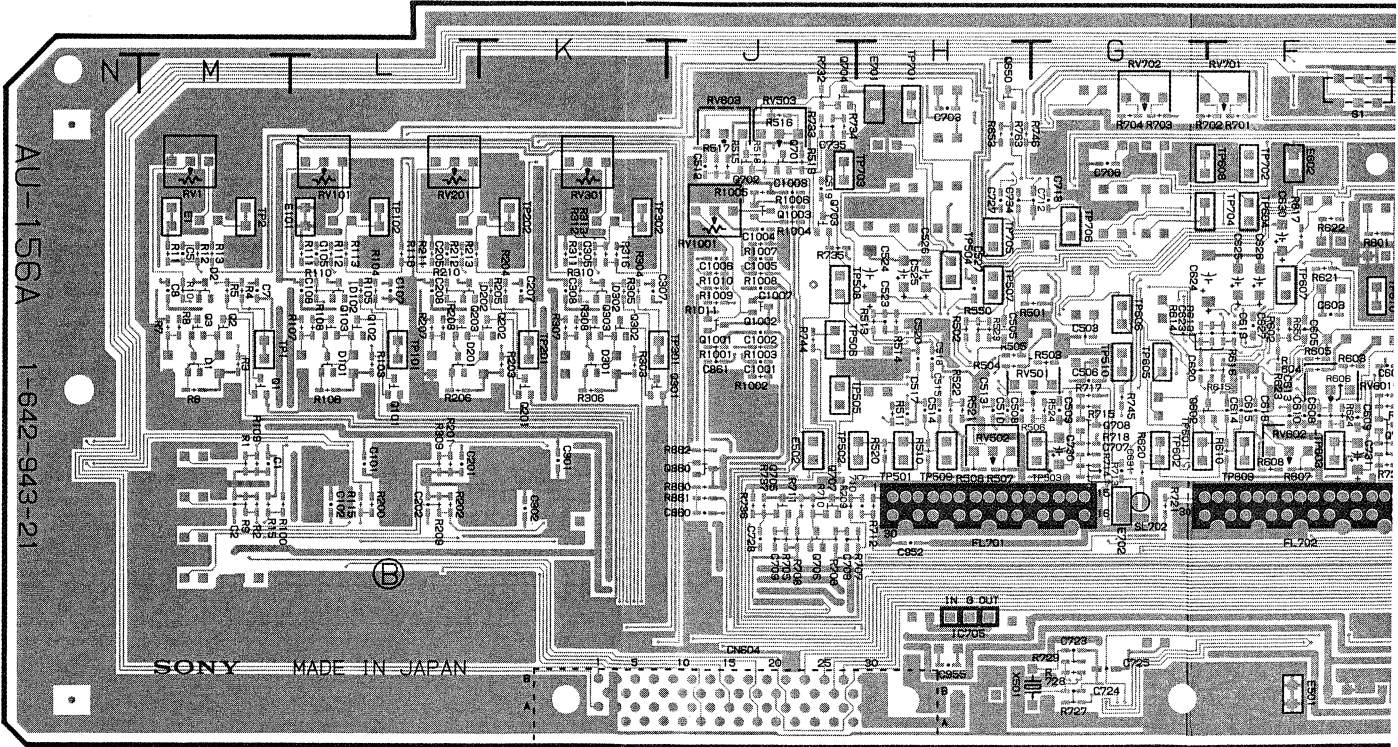
AU-156AP BOARD  
A Side



1-642-943-21 A SIDE

A Side is the same as Component Side

AU-156AP BOARD  
B Side



1-642-943-21 B SIDE

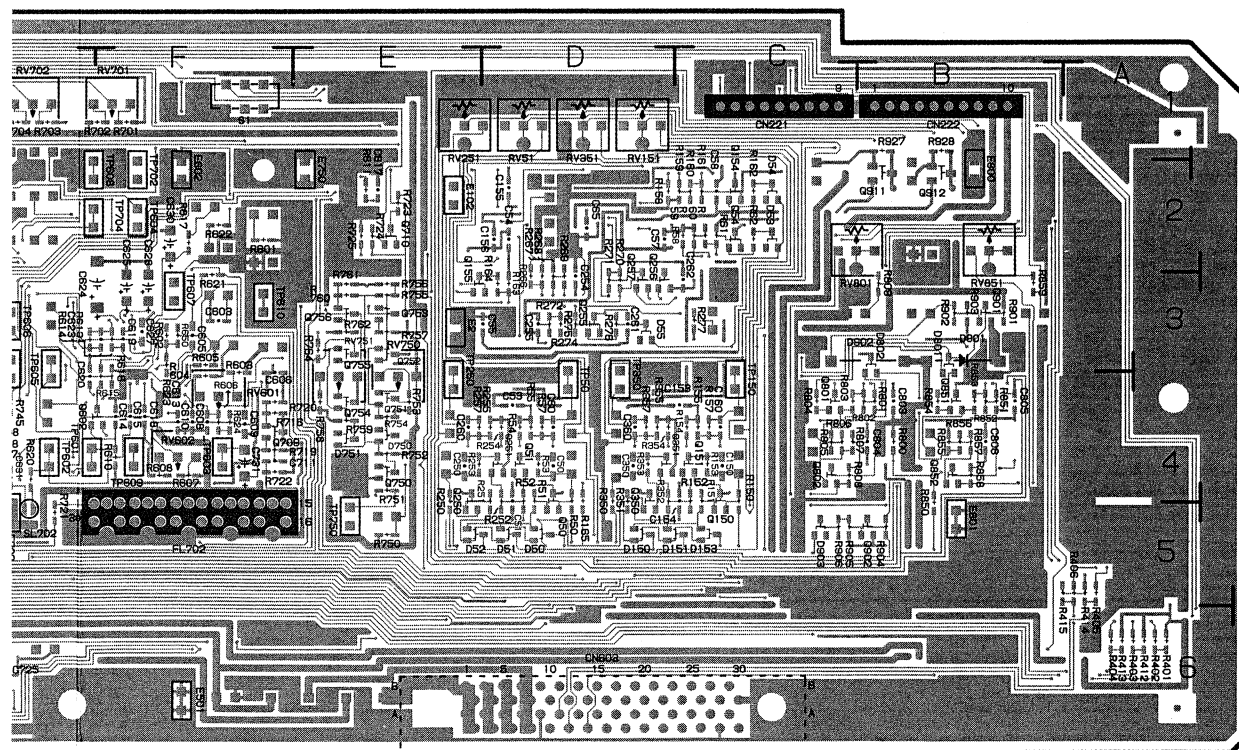
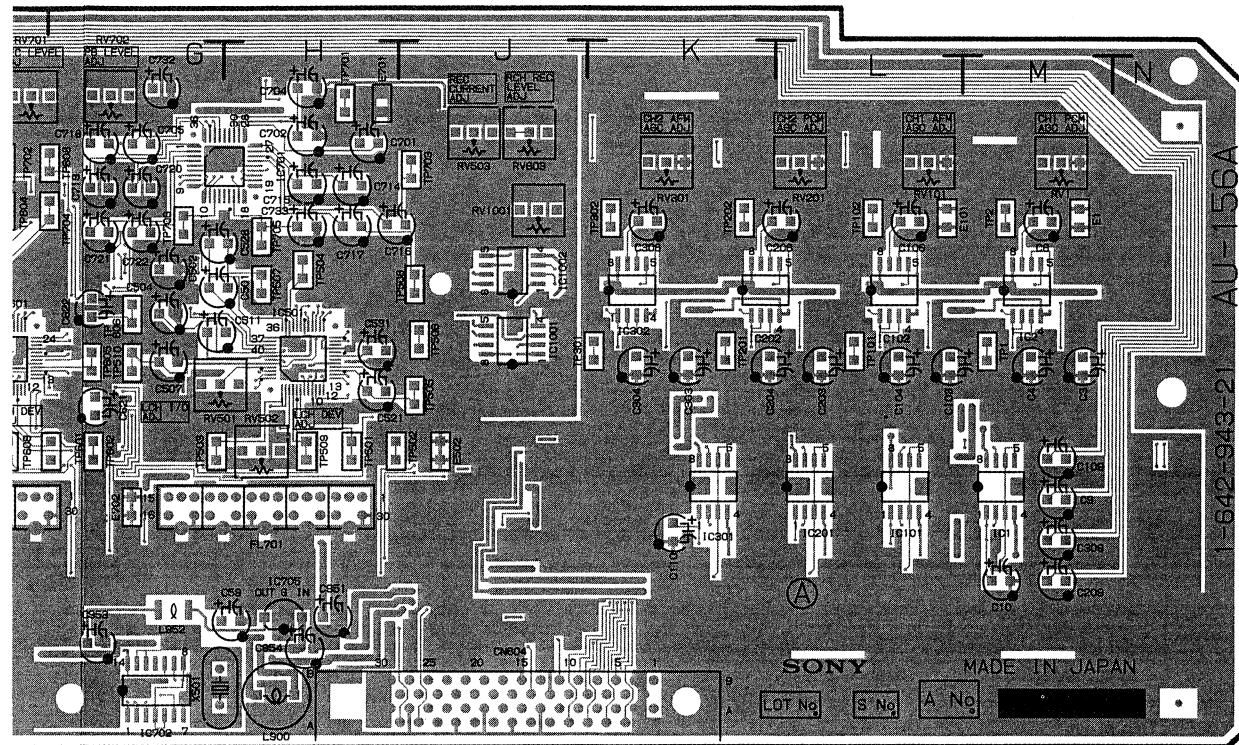
B Side is the same as Soldering Side

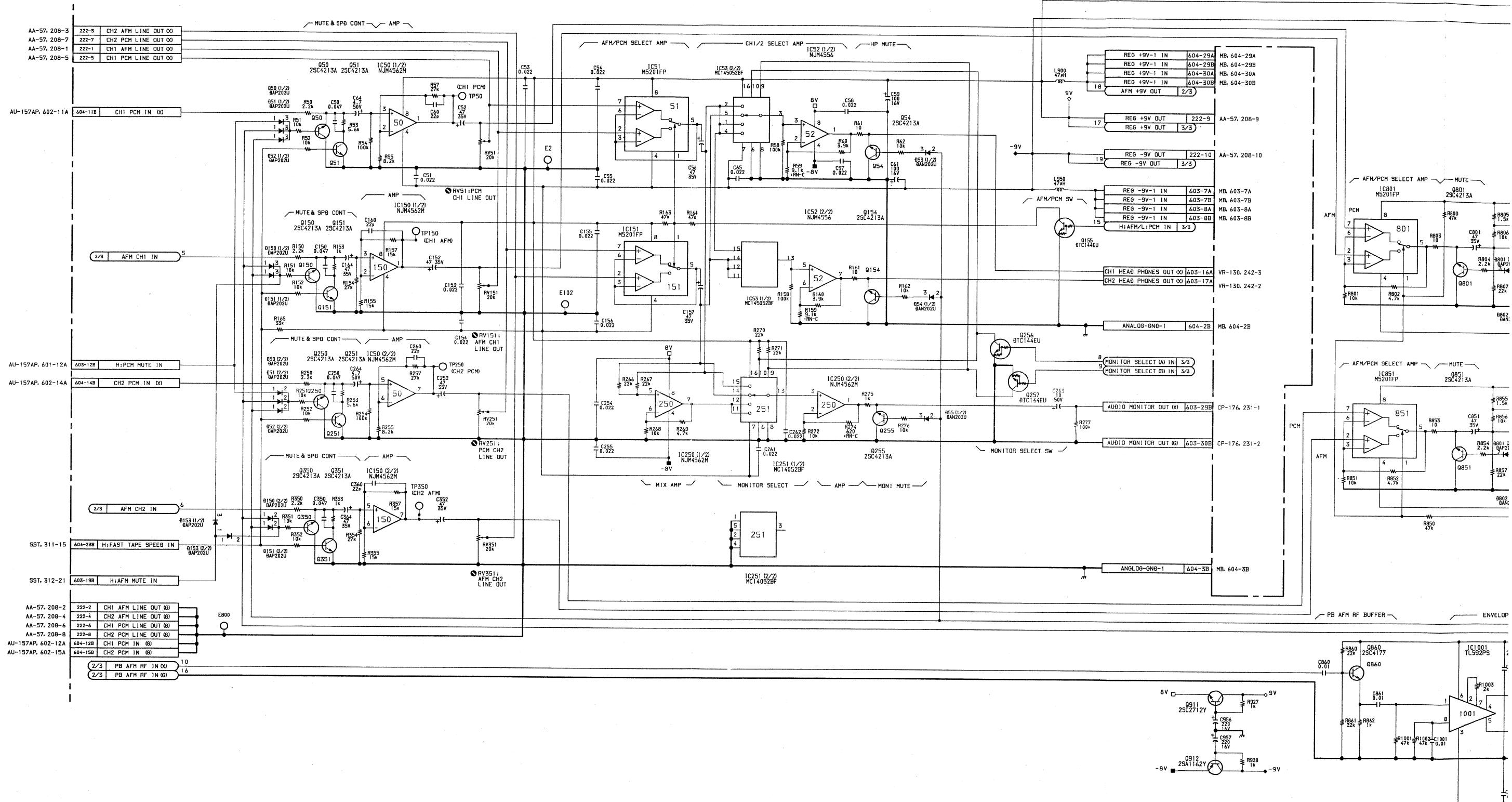
AU-156AP (1-642-943-21)

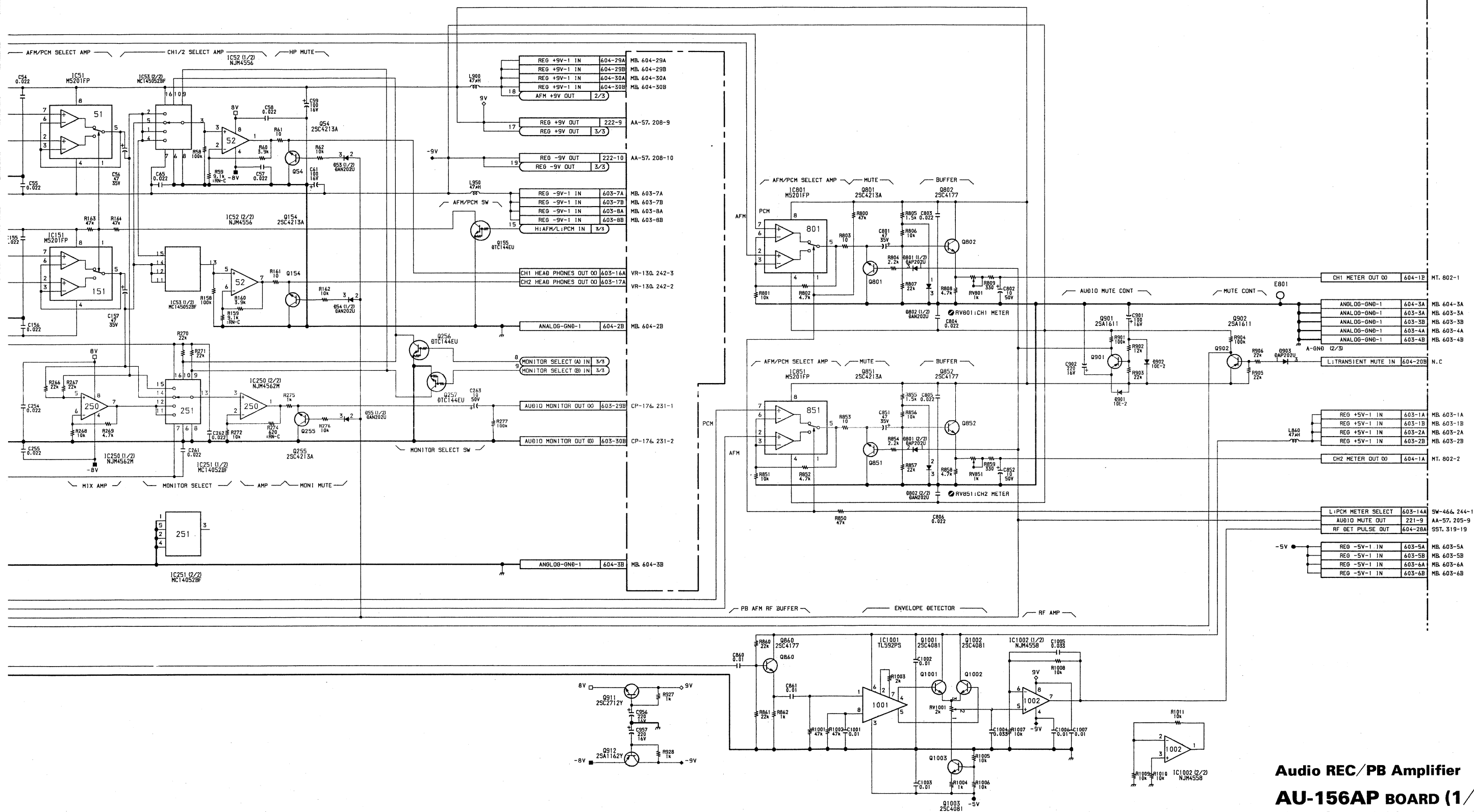
|       |      |        |      |        |     |
|-------|------|--------|------|--------|-----|
| CN221 | C-1  | IC705  | H-4  | RV251  | D-1 |
| CN222 | B-1  | IC751  | E-3  | RV301  | K-1 |
| CN603 | D-4  | IC801  | B-3  | RV351  | D-1 |
| CN604 | J-4  | IC851  | A-3  | RV501  | G-2 |
|       |      | IC1001 | J-2  | RV502  | H-3 |
|       |      | IC1002 | J-2  | RV503  | J-1 |
| D1    | M-2* |        |      | RV601  | F-2 |
| D2    | M-2* |        |      | RV602  | F-3 |
| D50   | D-3* | Q1     | M-2* | RV603  | J-1 |
| D51   | D-3* | Q2     | M-2* | RV701  | F-1 |
| D52   | D-3* | Q3     | M-2* | RV702  | G-1 |
| D53   | C-2* | Q50    | D-3* | RV750  | E-2 |
| D54   | C-1* | Q51    | D-3* | RV751  | E-2 |
| D55   | C-2* | Q54    | C-2* | RV801  | B-2 |
| D101  | L-2* | Q101   | L-2* | RV851  | A-2 |
| D102  | L-2* | Q102   | L-2* | RV1001 | J-1 |
| D150  | C-3* | Q103   | L-2* |        |     |
| D151  | C-3* | Q150   | C-3* |        |     |
| D153  | C-3* | Q151   | C-3* | S1     | F-1 |
| D201  | L-2* | Q154   | C-1* |        |     |
| D202  | K-2* | Q155   | D-2* | TP1    | M-2 |
| D301  | K-2* | Q201   | K-2* | TP2    | M-1 |
| D302  | K-2* | Q202   | K-2* | TP50   | D-2 |
| D750  | E-3* | Q203   | L-2* | TP101  | L-2 |
| D751  | E-3* | Q250   | D-3* | TP102  | L-1 |
| D801  | B-2* | Q251   | D-3* | TP150  | C-2 |
| D802  | B-2* | Q255   | D-2* | TP201  | K-2 |
| D901  | B-2  | Q256   | C-2* | TP202  | K-1 |
| D902  | B-2  | Q257   | C-2* | TP250  | D-2 |
| D903  | B-3* | Q301   | J-2* | TP301  | J-2 |
|       |      | Q302   | K-2* | TP302  | K-1 |
| E1    | M-1  | Q303   | K-2* | TP350  | C-2 |
| E2    | D-2  | Q350   | C-3* | TP501  | H-3 |
| E101  | L-1  | Q351   | C-3* | TP502  | H-3 |
| E102  | D-1  | Q602   | F-3* | TP503  | G-3 |
| E501  | F-4  | Q701   | J-1* | TP504  | H-2 |
| E502  | J-3  | Q702   | J-1* | TP505  | H-2 |
| E602  | F-1  | Q703   | H-1* | TP506  | H-2 |
| E701  | H-1  | Q704   | H-1* | TP507  | H-2 |
| E702  | G-3  | Q705   | J-3* | TP508  | H-2 |
| E750  | E-1  | Q706   | J-3* | TP509  | H-3 |
| E800  | B-1  | Q707   | H-3* | TP510  | G-2 |
| E801  | B-3  | Q708   | G-3* | TP601  | F-3 |
|       |      | Q709   | E-3* | TP602  | G-3 |
| FL701 | H-3  | Q710   | E-2* | TP603  | F-3 |
| FL702 | F-3  | Q750   | E-3* | TP604  | F-1 |
|       |      | Q751   | E-2* | TP605  | G-2 |
|       |      | Q752   | E-2* | TP606  | G-2 |
| IC1   | M-3  | Q753   | E-2* | TP607  | F-2 |
| IC2   | M-2  | Q754   | E-2* | TP608  | F-1 |
| IC50  | D-3  | Q754   | E-2* | TP609  | F-3 |
| IC51  | D-2  | Q755   | E-2* | TP610  | E-2 |
| IC52  | C-2  | Q756   | E-2* | TP701  | H-1 |
| IC53  | C-2  | Q801   | B-2* | TP702  | F-1 |
| IC101 | L-3  | Q802   | B-3* | TP703  | H-1 |
| IC102 | L-2  | Q851   | B-2* | TP704  | F-1 |
| IC150 | C-3  | Q852   | B-3* | TP705  | H-2 |
| IC151 | D-2  | Q860   | J-3* | TP706  | G-1 |
| IC201 | L-3  | Q901   | A-2* | TP750  | E-3 |
| IC202 | K-2  | Q902   | B-3* |        |     |
| IC250 | D-2  | Q911   | B-1* |        |     |
| IC251 | C-2  | Q912   | B-1* | X501   | G-4 |
| IC301 | K-3  | Q1001  | J-2* |        |     |
| IC302 | K-2  | Q1002  | J-2* |        |     |
| IC401 | A-4  | Q1003  | J-1* |        |     |
| IC501 | H-2  |        |      |        |     |
| IC601 | F-2  | RV1    | M-1  |        |     |
| IC701 | G-1  | RV51   | D-1  |        |     |
| IC702 | G-4  | RV101  | L-1  |        |     |
| IC703 | E-2  | RV151  | C-1  |        |     |
| IC704 | E-1  | RV201  | L-1  |        |     |

\* mark ; B SIDE mount







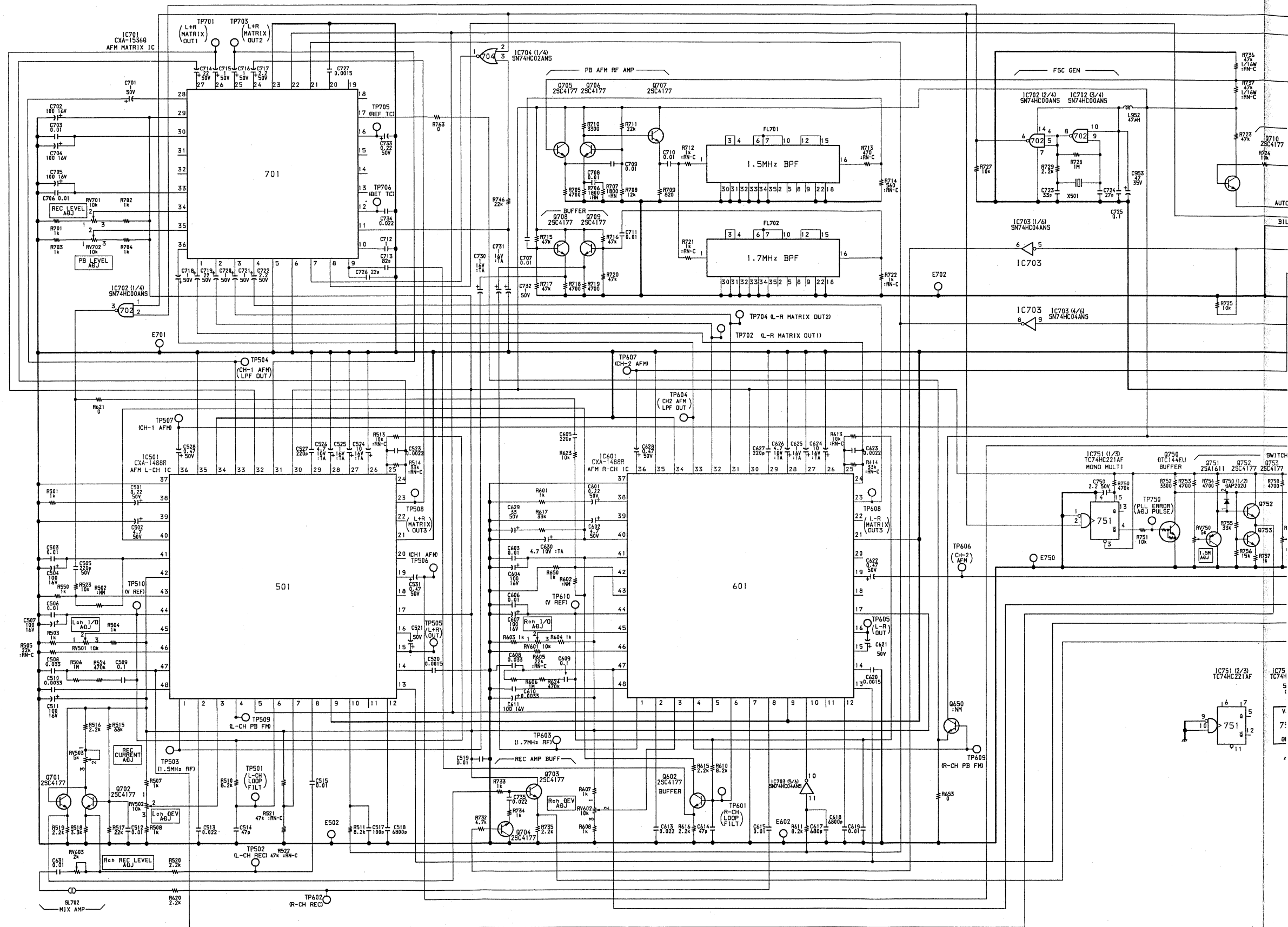


Audio REC/PB Amplifier

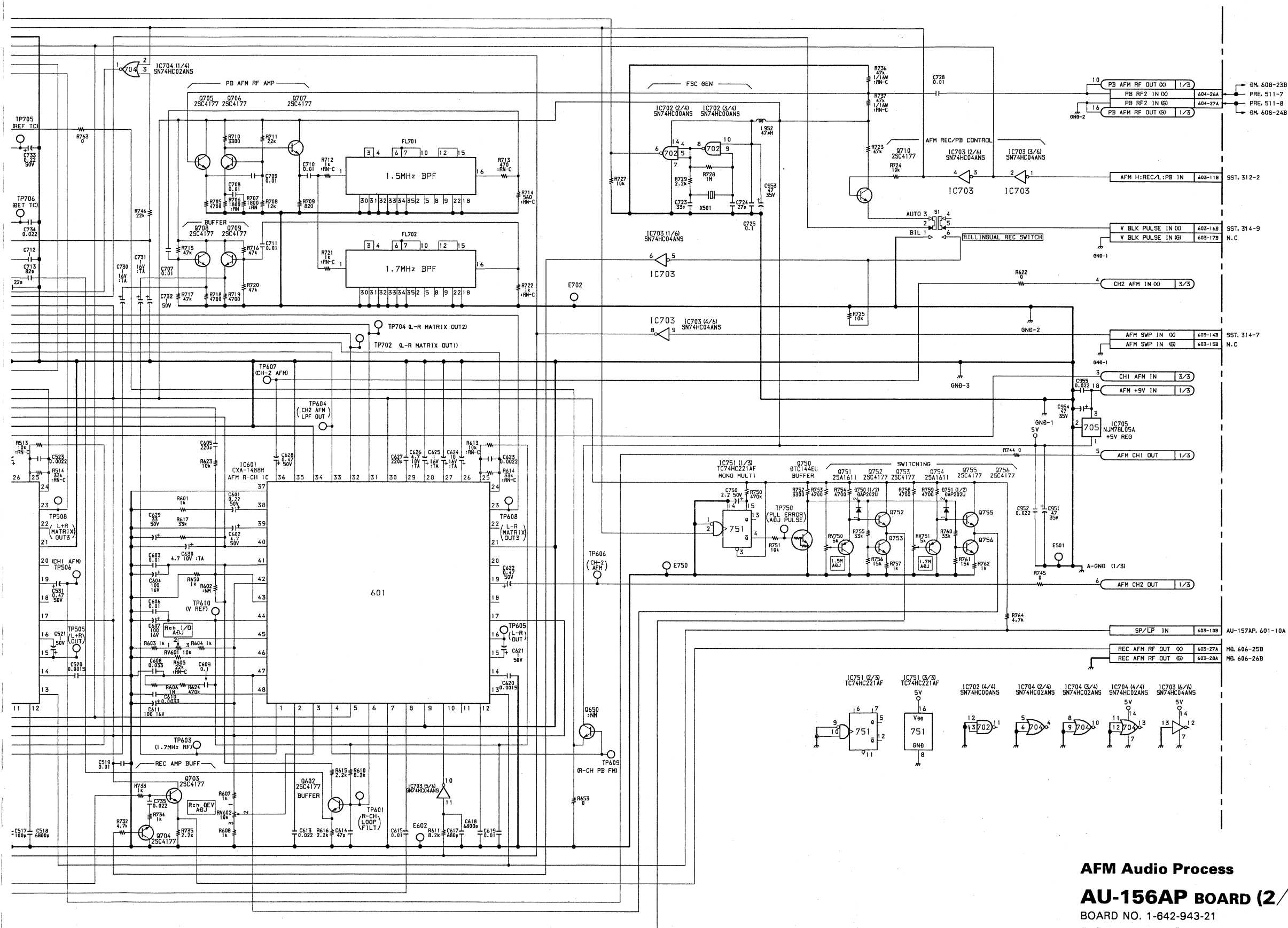
**AU-156AP BOARD (1/3)**

BOARD NO. 1-642-943-21

EVO-9850P (EK) : #10001—





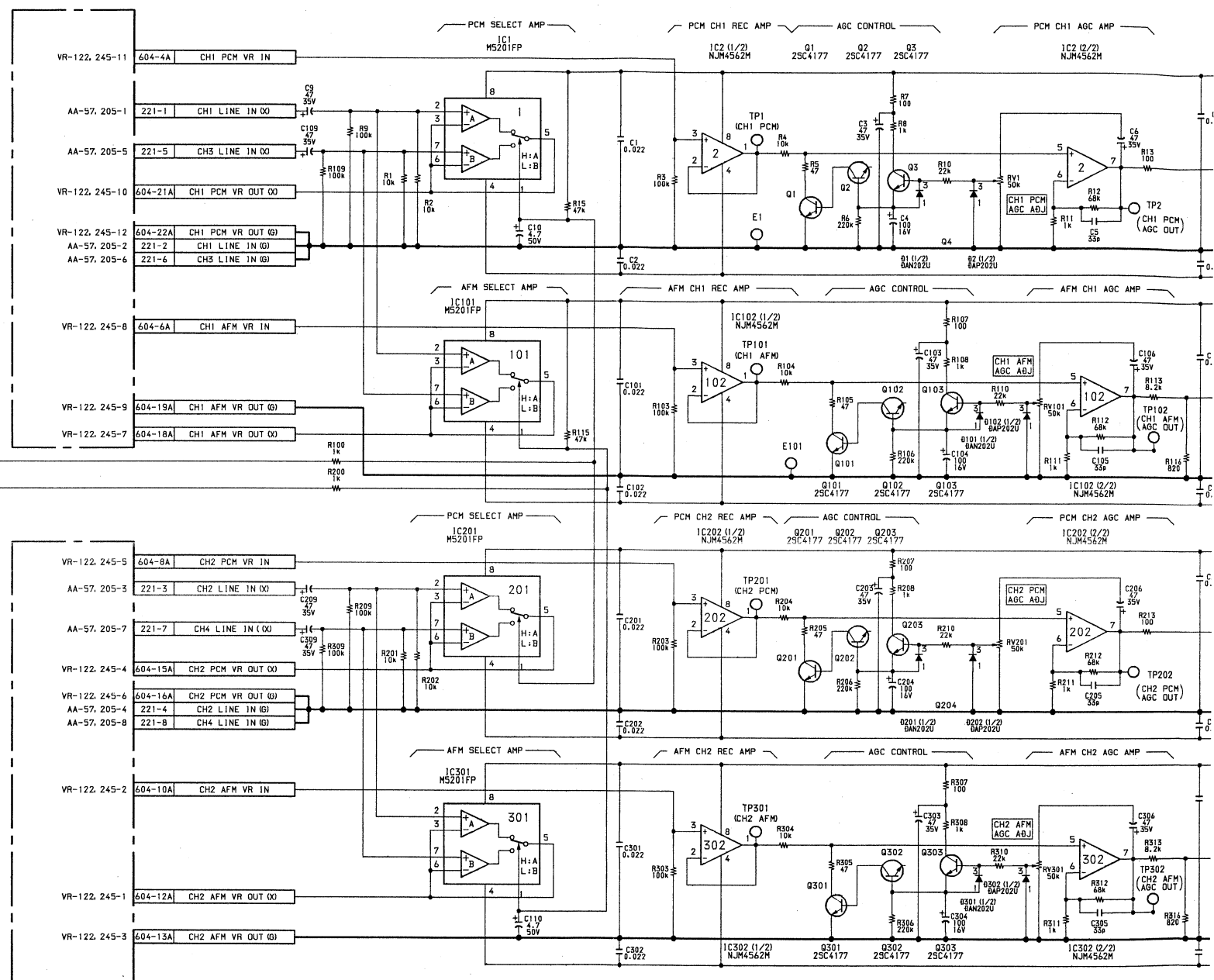
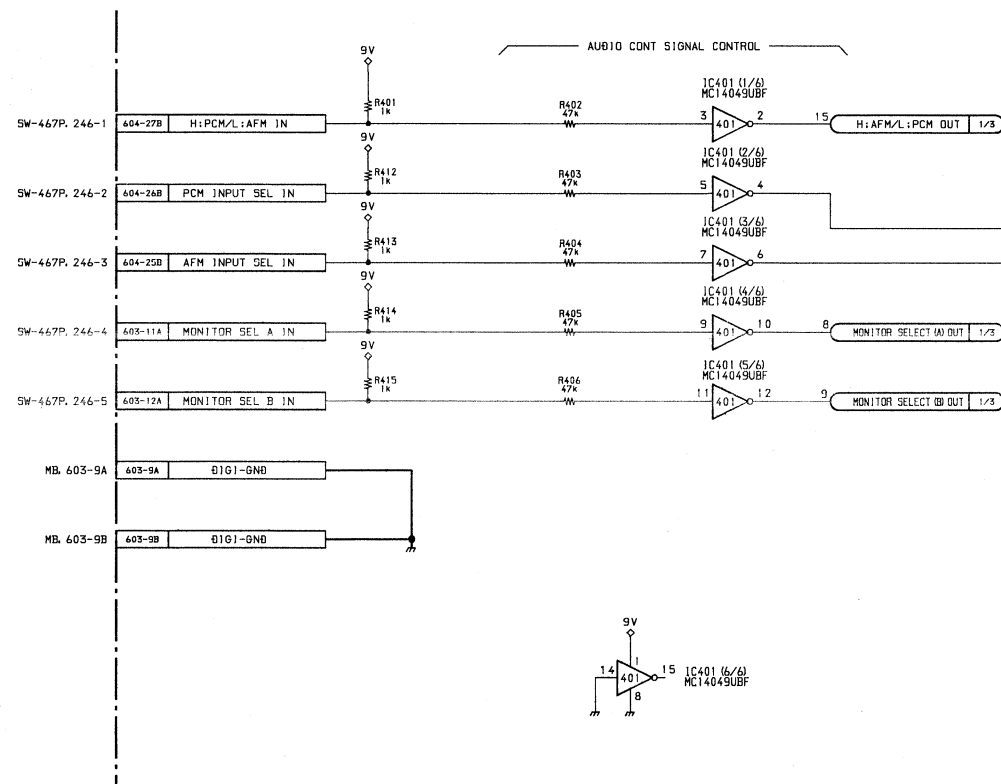


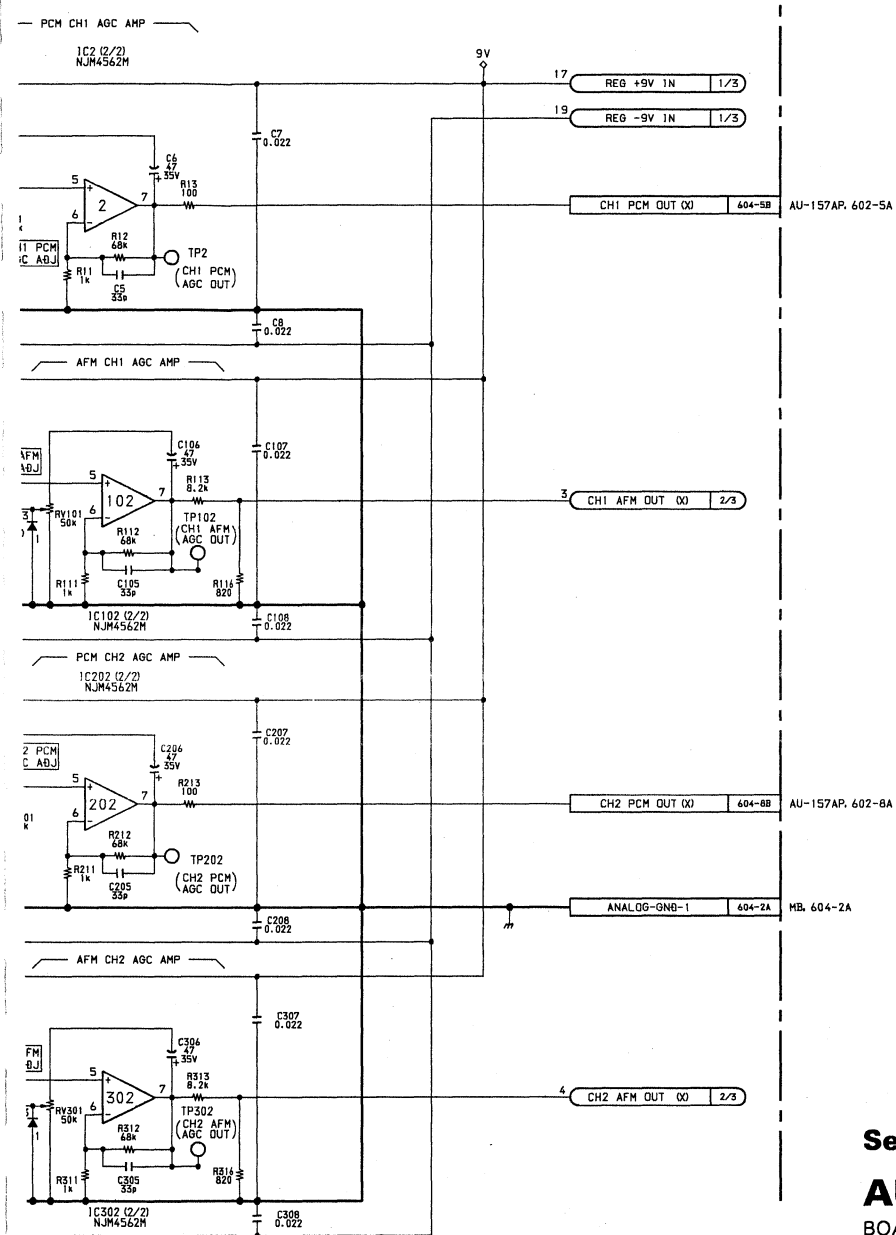
## AFM Audio Process

## AU-156AP BOARD (2/3)

BOARD NO. 1-642-943-21

EVO-9850P (EK) : #10001 —





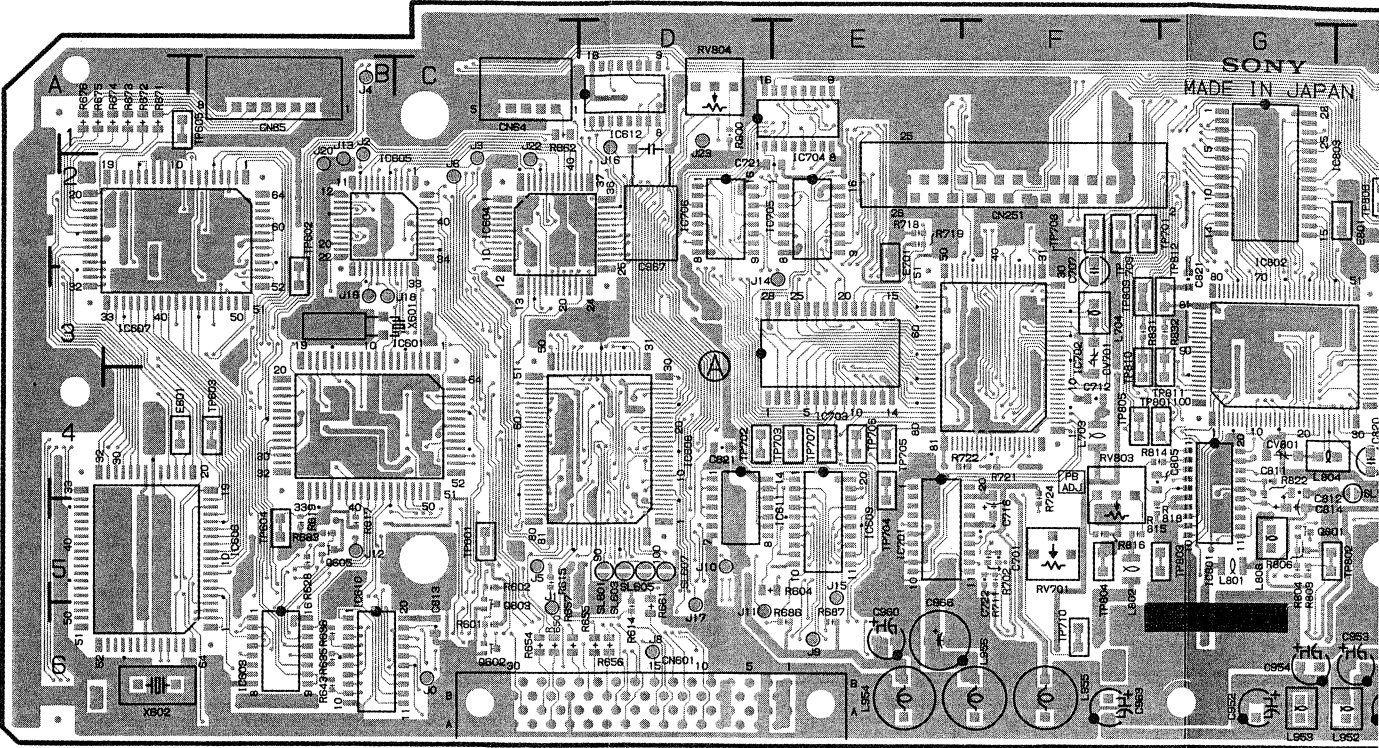
Select Buffer

# **AU-156AP BOARD (3/3)**

BOARD NO. 1-642-943-21

EVO-9850P (EK) : #10001 —

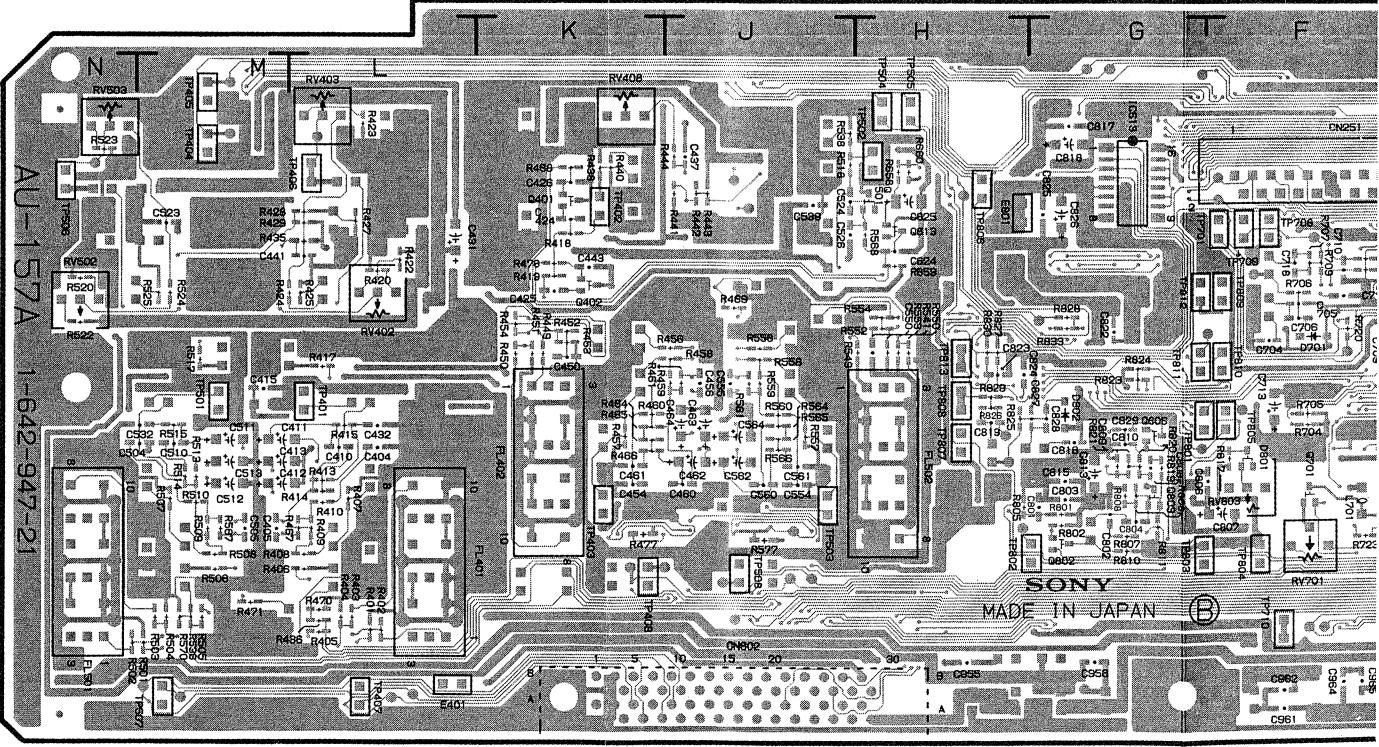
AU-157AP BOARD  
A Side



1-642-947-21 A SIDE

A Side is the same as Component Side

AU-157AP BOARD  
B Side



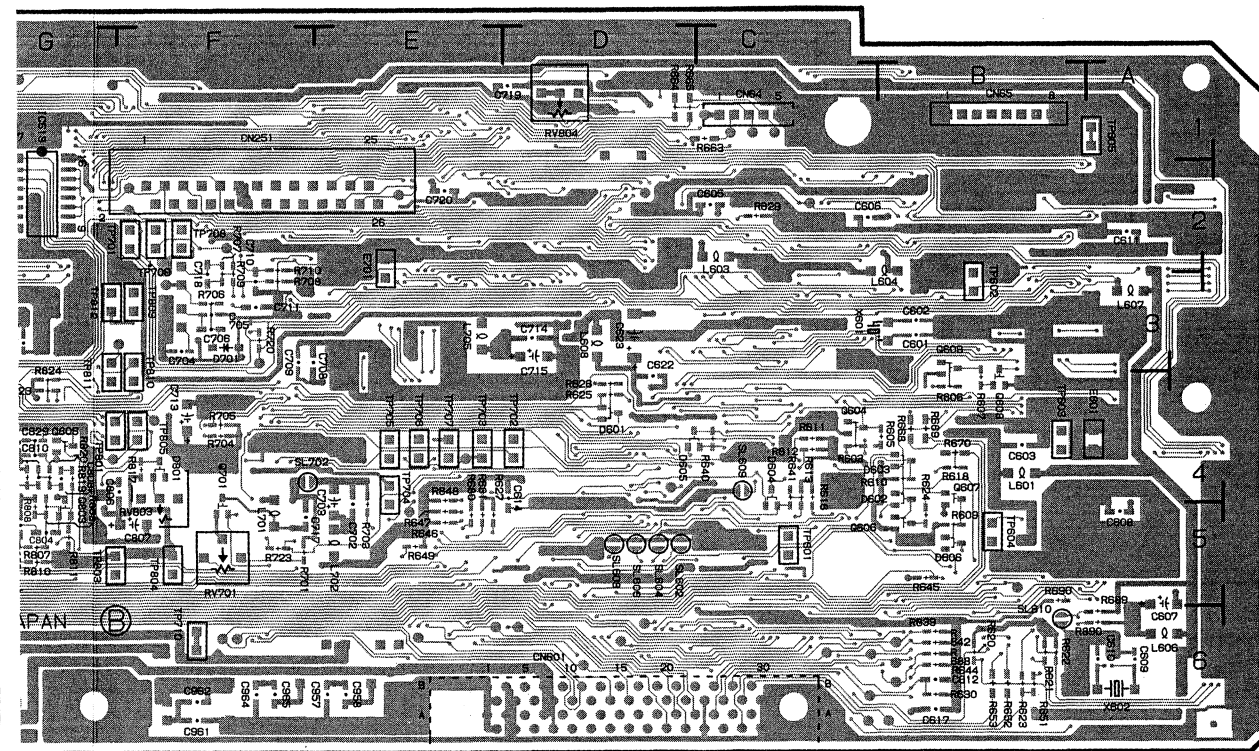
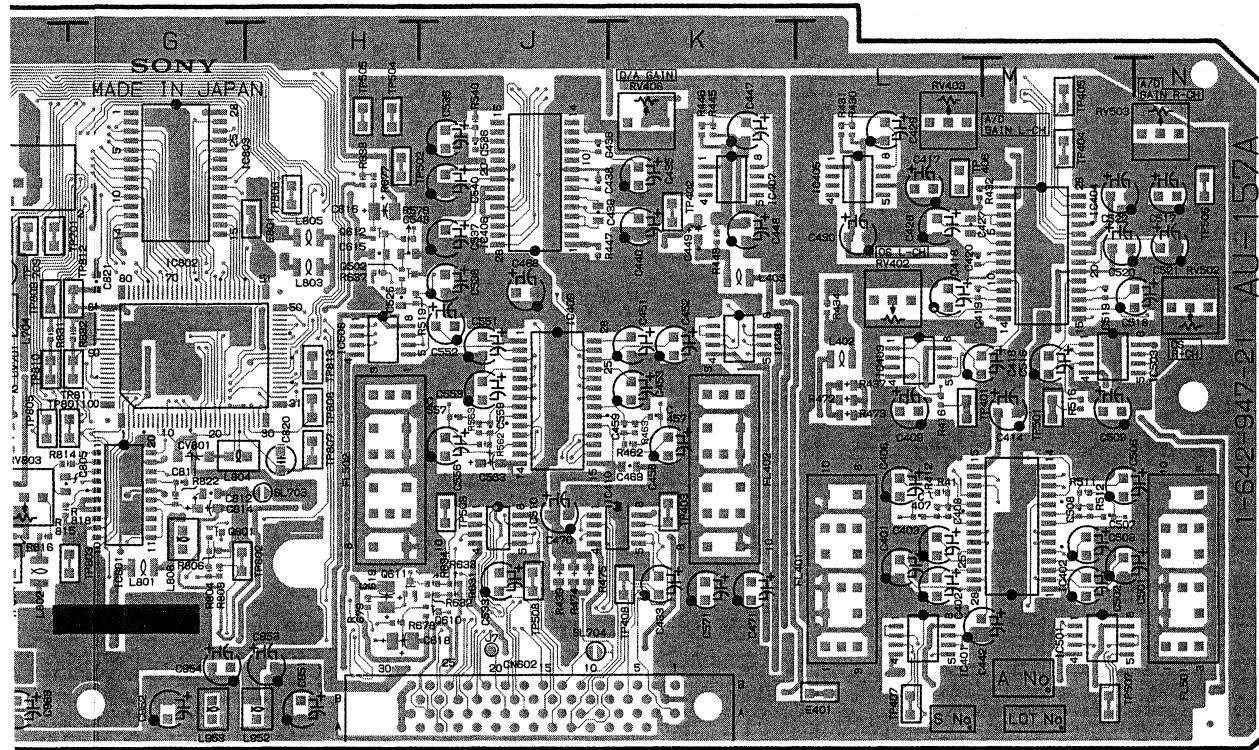
1-642-947-21 B SIDE

B Side is the same as Soldering Side

AU-157AP(1-642-947-21)

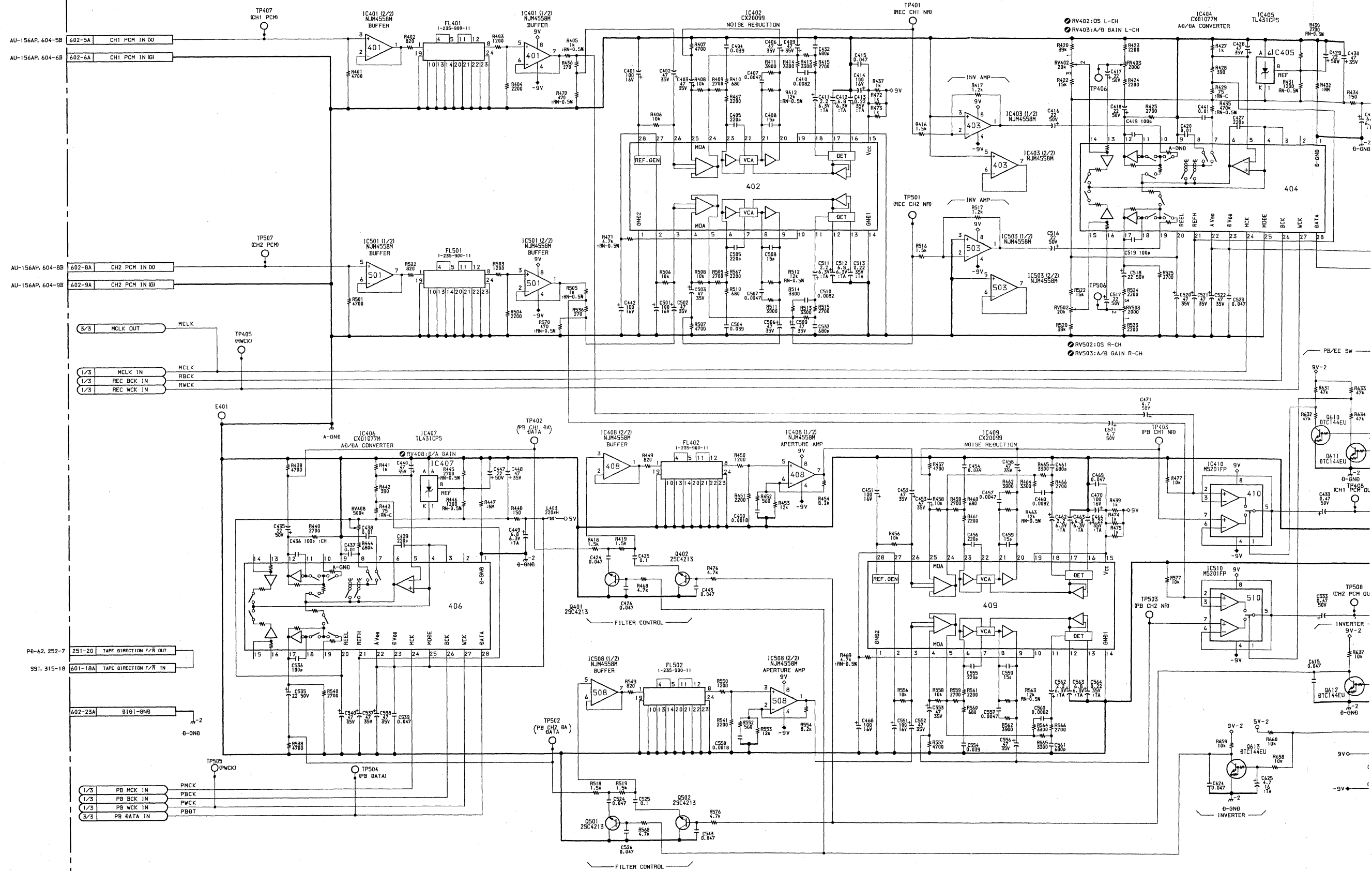
|       |      |       |      |                       |     |
|-------|------|-------|------|-----------------------|-----|
| CN64  | C-1  | Q602  | C-6  | TP812                 | G-3 |
| CN65  | B-1  | Q603  | C-6  | TP813                 | H-3 |
| CN251 | F-2  | Q604  | C-4* |                       |     |
| CN601 | D-6  | Q605  | B-5  | X601                  | B-3 |
| CN602 | J-6  | Q606  | B-5* | X602                  | A-6 |
|       |      | Q607  | B-4* |                       |     |
| CV701 | F-3  | Q608  | B-4* | * mark ; B SIDE mount |     |
| CV801 | G-4  | Q609  | B-3* |                       |     |
|       |      | Q610  | J-6  |                       |     |
| D601  | D-4* | Q611  | H-5  |                       |     |
| D602  | B-4* | Q612  | H-2  |                       |     |
| D603  | B-4* | Q613  | H-2* |                       |     |
| D604  | C-4* | Q701  | F-5* |                       |     |
| D605  | D-4* | Q801  | G-5  |                       |     |
| D606  | B-5* | Q802  | G-5* |                       |     |
| D701  | F-3* | Q803  | G-5* |                       |     |
| D801  | F-4* | Q806  | G-4* |                       |     |
| D802  | G-4* |       |      |                       |     |
|       |      | RV402 | L-3  |                       |     |
| E401  | L-6  | RV403 | L-1  |                       |     |
| E601  | A-4  | RV408 | K-1  |                       |     |
| E701  | E-2  | RV502 | N-3  |                       |     |
| E801  | H-2  | RV503 | N-1  |                       |     |
|       |      | RV701 | F-5  |                       |     |
| FL401 | L-5  | RV803 | F-4  |                       |     |
| FL402 | K-4  | RV804 | D-1  |                       |     |
| FL501 | N-5  |       |      |                       |     |
| FL502 | H-4  | TP401 | L-4  |                       |     |
|       |      | TP402 | K-2  |                       |     |
| IC401 | L-6  | TP403 | K-5  |                       |     |
| IC402 | M-5  | TP404 | M-1  |                       |     |
| IC403 | L-3  | TP405 | M-1  |                       |     |
| IC404 | M-2  | TP406 | L-2  |                       |     |
| IC405 | L-2  | TP407 | L-6  |                       |     |
| IC406 | J-2  | TP408 | K-5  |                       |     |
| IC407 | K-2  | TP501 | M-4  |                       |     |
| IC408 | K-3  | TP502 | H-2  |                       |     |
| IC409 | J-3  | TP503 | J-5  |                       |     |
| IC410 | J-5  | TP504 | H-1  |                       |     |
| IC501 | M-6  | TP505 | H-1  |                       |     |
| IC503 | M-3  | TP506 | N-2  |                       |     |
| IC508 | H-3  | TP507 | M-6  |                       |     |
| IC510 | J-5  | TP508 | J-5  |                       |     |
| IC601 | B-4  | TP601 | C-5  |                       |     |
| IC603 | B-6  | TP602 | B-3  |                       |     |
| IC604 | C-2  | TP603 | B-4  |                       |     |
| IC605 | B-2  | TP604 | B-5  |                       |     |
| IC606 | A-5  | TP605 | A-1  |                       |     |
| IC607 | A-2  | TP701 | F-2  |                       |     |
| IC608 | D-4  | TP702 | D-4  |                       |     |
| IC609 | E-4  | TP703 | E-4  |                       |     |
| IC610 | B-6  | TP704 | E-4  |                       |     |
| IC611 | D-4  | TP705 | E-4  |                       |     |
| IC612 | D-1  | TP706 | E-4  |                       |     |
| IC613 | G-1  | TP707 | E-4  |                       |     |
| IC701 | E-4  | TP708 | F-2  |                       |     |
| IC702 | F-3  | TP709 | F-2  |                       |     |
| IC703 | D-4  | TP710 | F-6  |                       |     |
| IC704 | D-1  | TP801 | G-4  |                       |     |
| IC705 | E-2  | TP802 | G-5  |                       |     |
| IC706 | D-2  | TP803 | G-5  |                       |     |
| IC801 | G-4  | TP804 | F-5  |                       |     |
| IC802 | G-3  | TP805 | F-4  |                       |     |
| IC803 | G-1  | TP806 | H-2  |                       |     |
|       |      | TP807 | H-4  |                       |     |
|       |      | TP808 | H-4  |                       |     |
| Q401  | K-2* | TP809 | F-3  |                       |     |
| Q402  | K-3* | TP810 | F-3  |                       |     |
| Q501  | H-2* | TP811 | G-3  |                       |     |
| Q502  | H-3  |       |      |                       |     |





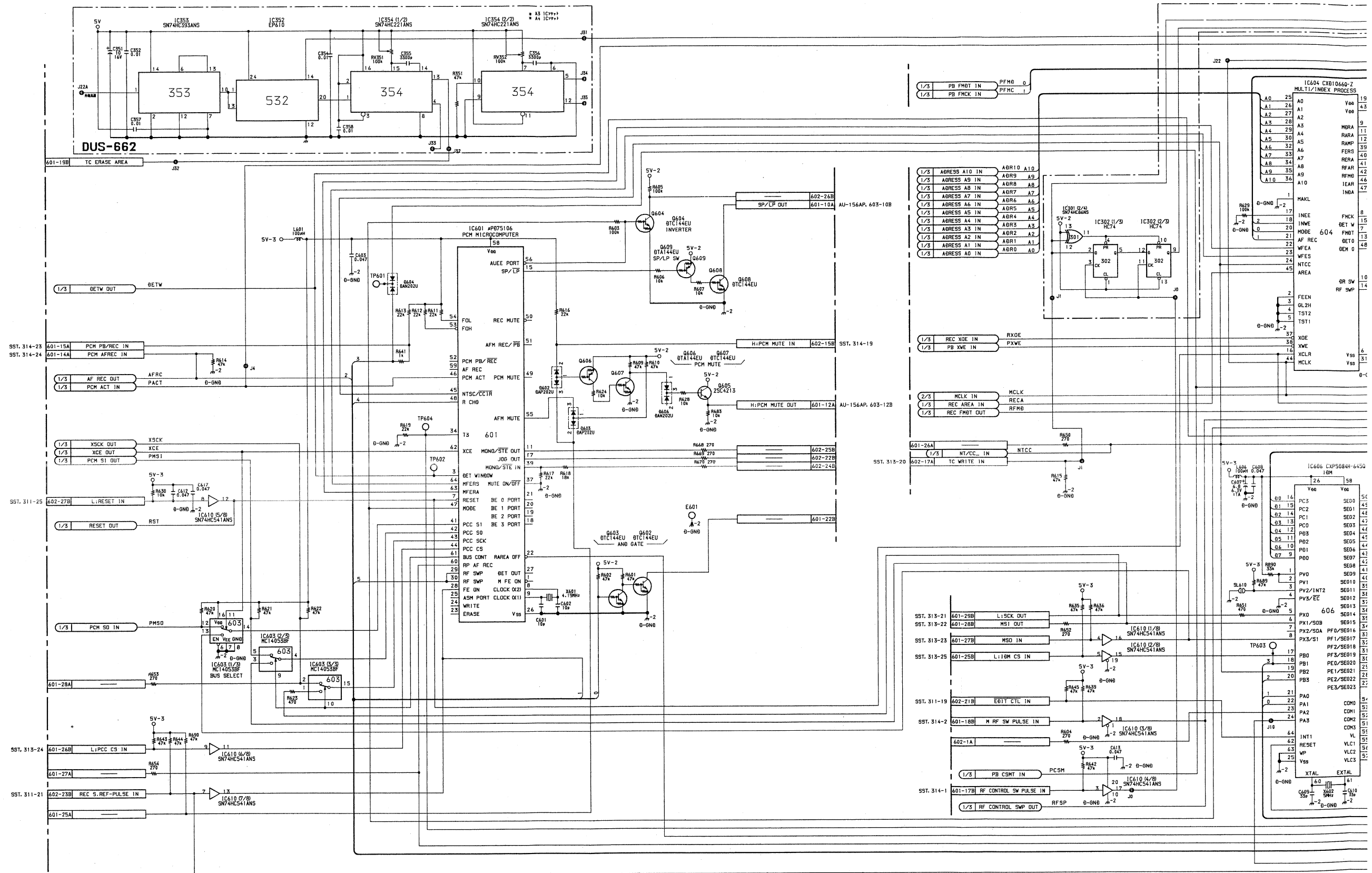


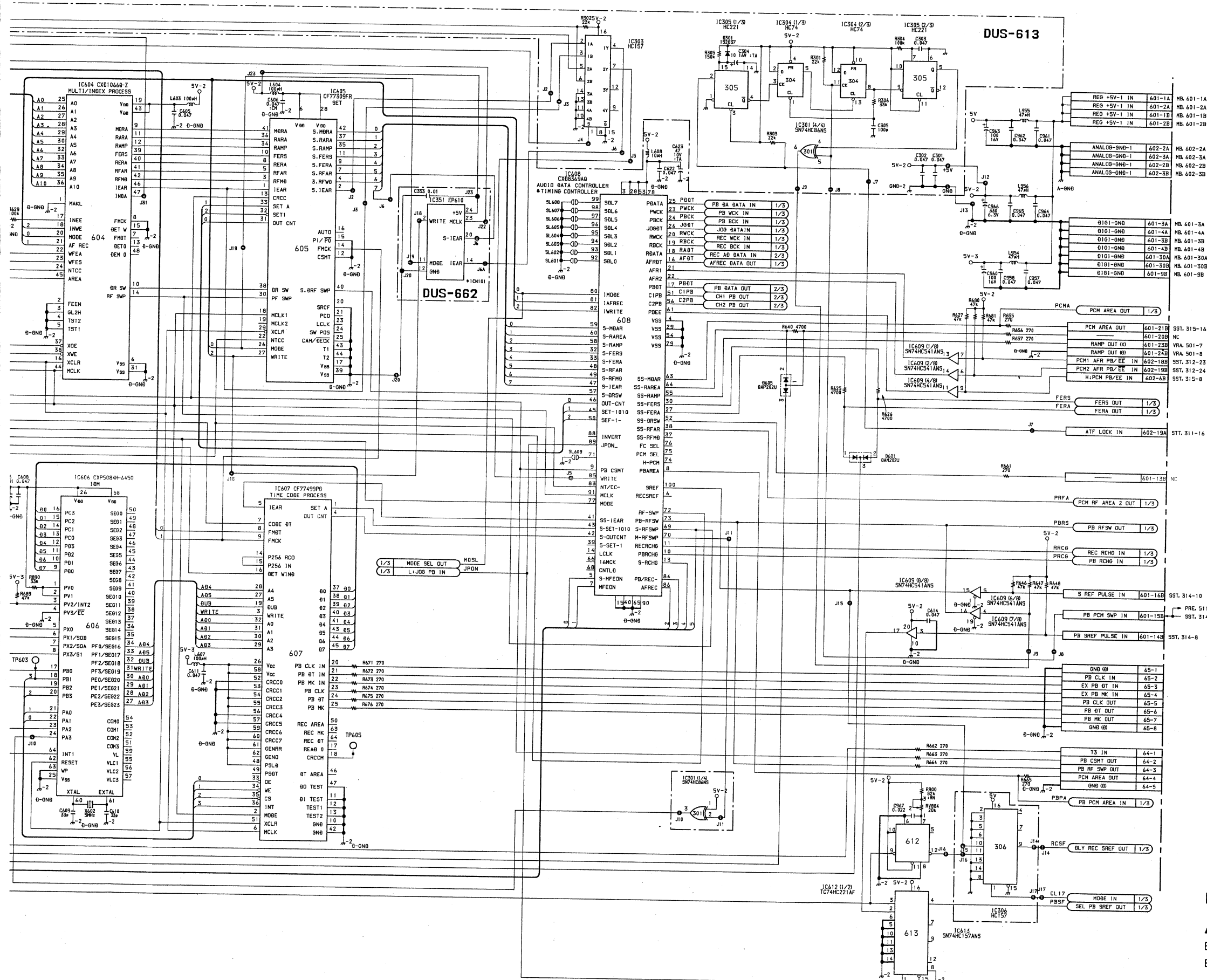












PCM Audio Control and Time Code

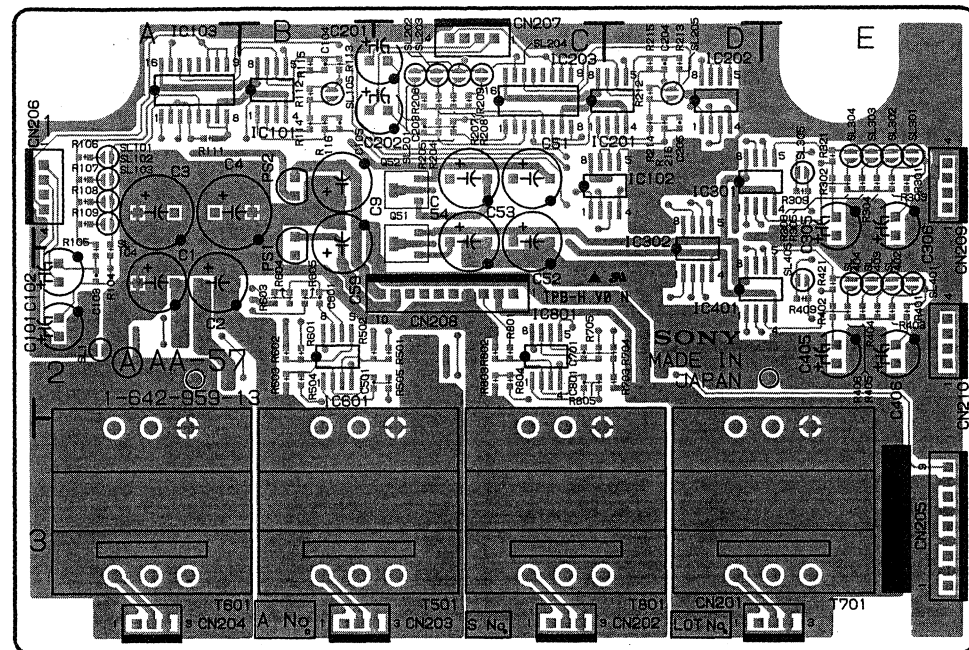
AU-157AP BOARD (3/3)

BOARD NO. 1-642-947-21  
EVO-9850P (EK) : #10001—

AA-57P (1-642-959-13)

# AA-57P BOARD

## A Side

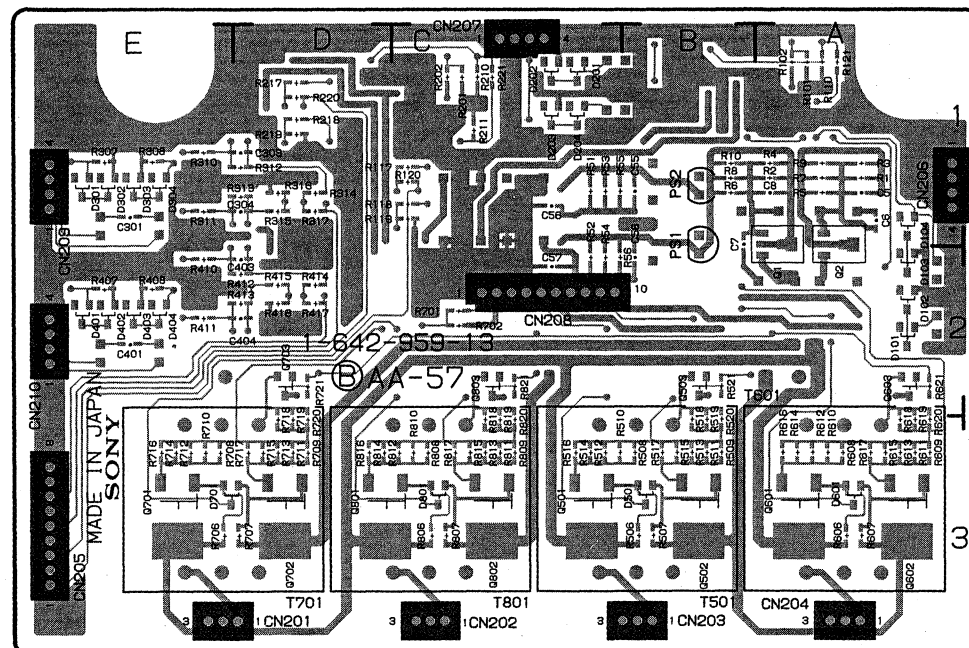


1-642-959-13 A SIDE

A Side is the same as Component Side

# AA-57P BOARD

## B Side



1-642-959-13 B SIDE

B Side is the same as Soldering Side

CN201 D-3  
CN202 D-3  
CN203 C-3  
CN204 A-3  
CN205 E-3  
CN206 A-1  
CN207 C-1  
CN208 C-2  
CN209 E-2  
CN210 E-3

D101 A-2\*  
D102 A-2\*  
D103 A-2\*  
D104 A-2\*  
D201 C-1\*  
D202 C-1\*  
D203 C-1\*  
D204 C-1\*  
D301 E-1\*  
D302 E-1\*  
D303 E-1\*  
D304 E-1\*  
D401 E-2\*  
D402 E-2\*  
D403 E-2\*  
D404 E-2\*  
D501 B-3\*  
D601 A-3\*  
D701 E-3\*  
D801 C-3\*

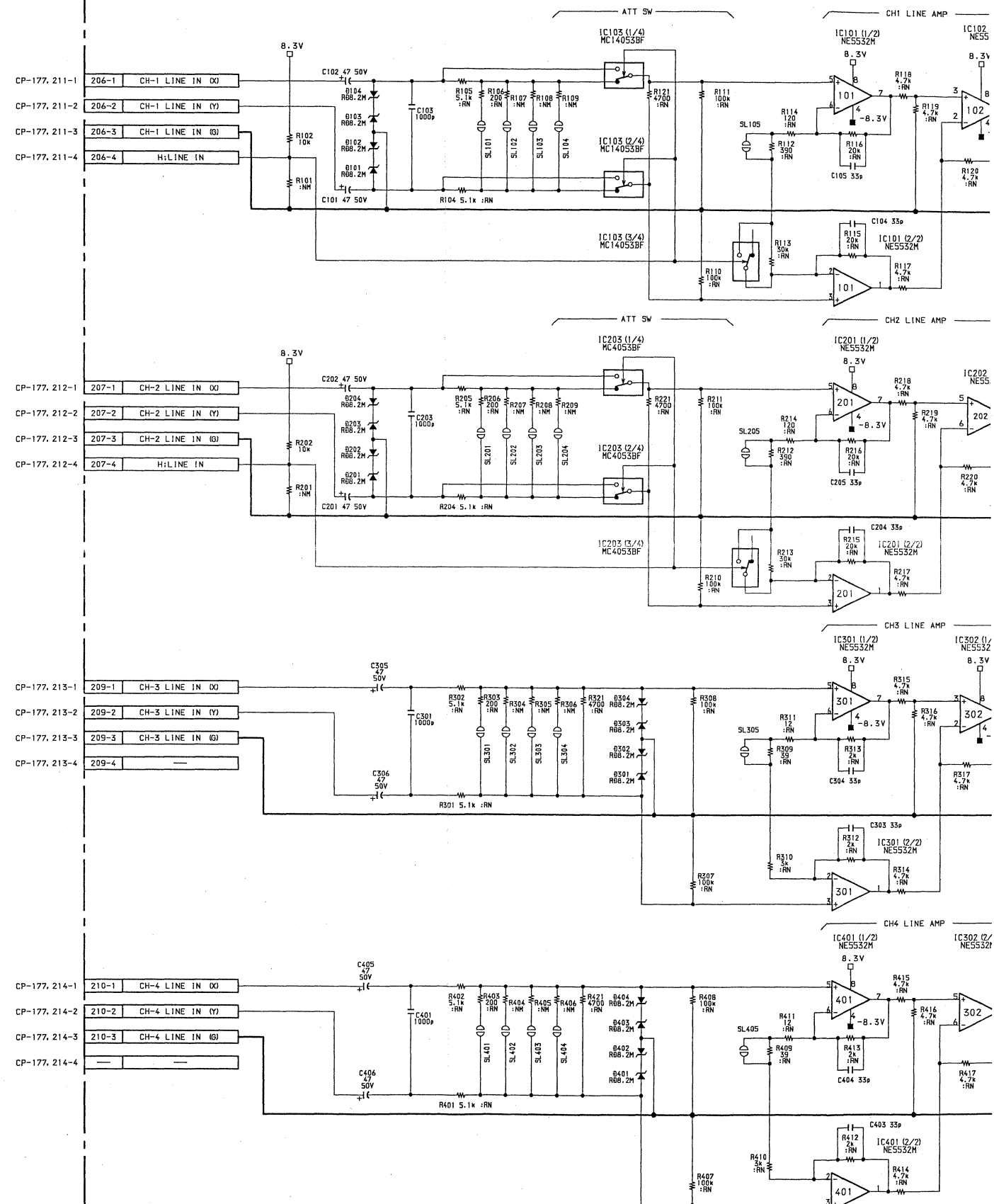
IC101 B-1  
IC102 D-1  
IC103 A-1  
IC201 C-1  
IC202 D-1  
IC203 C-1  
IC301 D-1  
IC302 D-1  
IC401 D-2  
IC601 B-2  
IC801 C-2

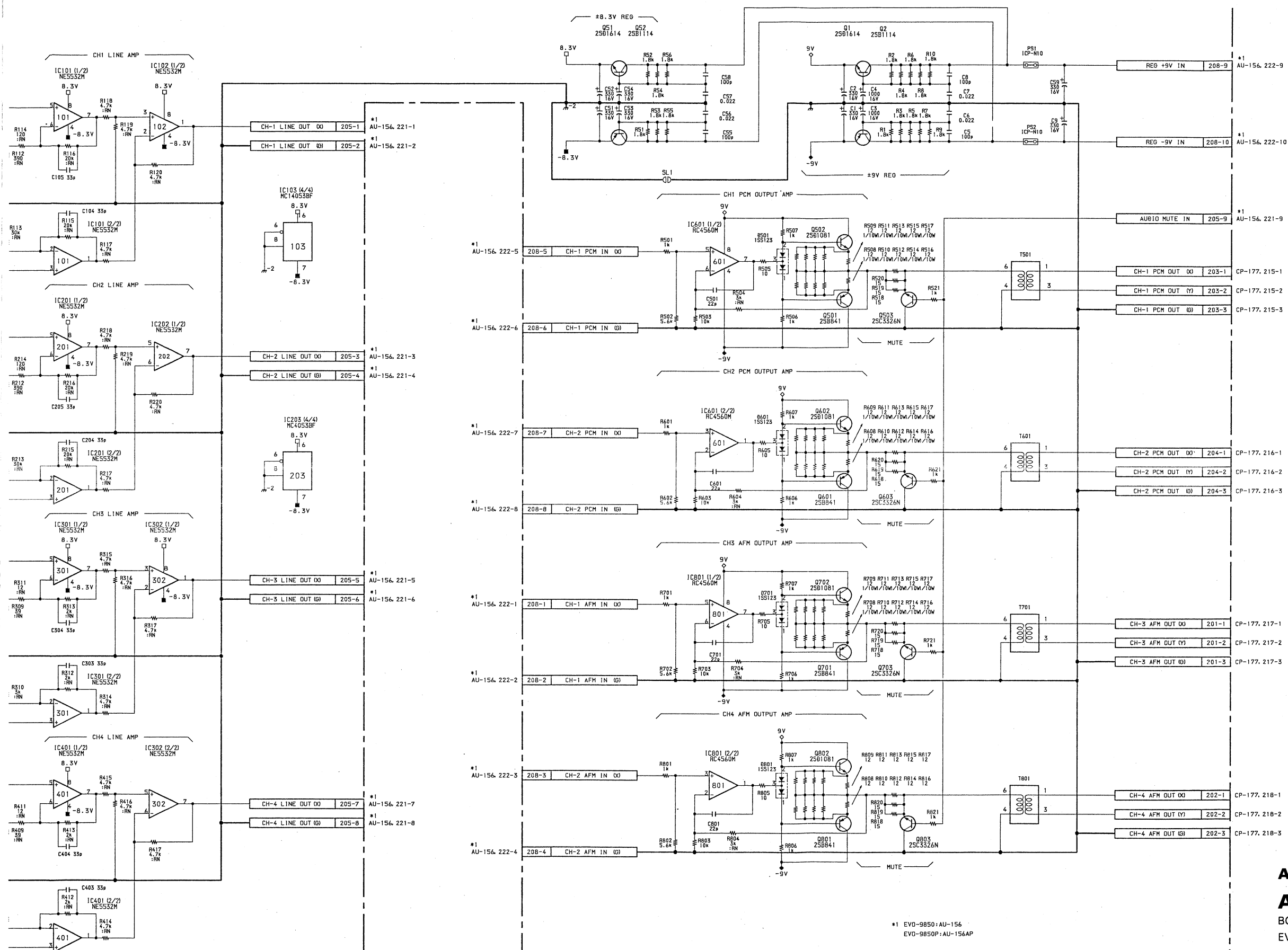
PS1 B-2  
PS2 B-1

Q1 A-2\*  
Q2 A-2\*  
Q51 C-1  
Q52 C-1  
Q501 C-3\*  
Q502 B-3\*  
Q503 B-2\*  
Q601 A-3\*  
Q602 A-3\*  
Q603 A-2\*  
Q701 E-3\*  
Q702 D-3\*  
Q703 D-2\*  
Q801 D-3\*  
Q802 C-3\*  
Q803 C-2\*

T501 C-3  
T601 A-3  
T701 E-3  
T801 D-3

\* mark ; B SIDE mount





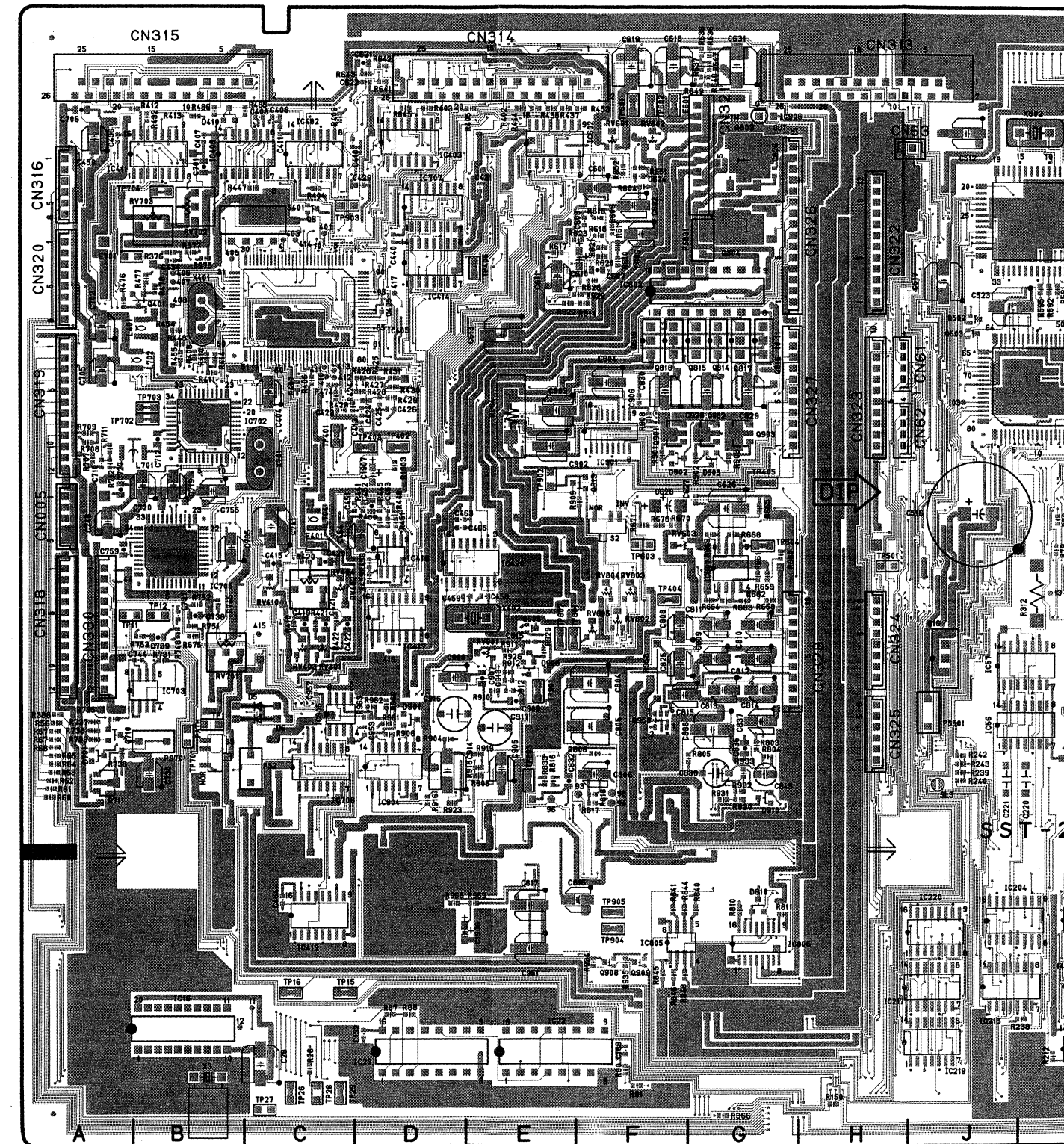




SST-2AP (1-642-951-21)

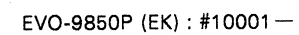
|       |       |       |      |        |      |      |       |        |      |       |      |
|-------|-------|-------|------|--------|------|------|-------|--------|------|-------|------|
| CN5   | A-5   | D604  | F-3* | IC213  | J-10 | Q2   | N-4*  | Q904   | E-6* | TP703 | B-4  |
| CN31  | N-3   | D605  | F-2* | IC214  | K-6  | Q3   | M-4*  | Q905   | E-6  | TP704 | A-2* |
| CN51  | P-6   | D701  | A-7  | IC216  | P-10 | Q4   | P-4*  | Q906   | D-7* | TP801 | F-6  |
| CN52  | N-6   | D802  | G-3* | IC217  | H-9  | Q6   | P-2*  | Q907   | D-8* | TP802 | E-6  |
| CN53  | Q-6   | D810  | G-9  | IC219  | J-10 | Q8   | C-2   | Q908   | F-9  | TP803 | E-7  |
| CN54  | R-6   | D811  | G-9* | IC220  | J-9  | Q15  | Q-4*  | Q909   | F-9  | TP901 | E-7  |
| CN55  | R-6   | D901  | D-7  | IC221  | K-9  | Q16  | J-6   | Q950   | F-7  | TP902 | E-5  |
| CN61  | J-4   | D902  | F-5  | IC401  | C-2* | Q17  | M-6*  | Q951   | G-8* | TP903 | C-2  |
| CN62  | J-4   | D903  | G-5  | IC402  | C-2  | Q18  | M-5*  | Q952   | G-2* | TP904 | F-9  |
| CN63  | H-2   | D904  | E-7* | IC403  | D-2  | Q19  | L-5*  | Q953   | G-4* | TP905 | F-9  |
| CN307 | R-3   | D905  | E-6  | IC404  | B-2* | Q20  | L-5*  | Q954   | G-4* |       |      |
| CN309 | R-2   | D906  | F-4* | IC405  | D-3  | Q21  | P-1   | Q955   | C-8* | X1    | R-7  |
| CN311 | P-1   | D907  | G-4* | IC406  | C-4* | Q201 | K-8*  | Q956   | E-9* | X2    | R-4  |
| CN312 | L-1   | D908  | F-4* | IC408  | B-2  | Q202 | K-8*  | Q957   | E-8* | X3    | B-10 |
| CN313 | H-1   | D909  | C-7* | IC409  | B-3* | Q203 | M-6*  | Q958   | J-6* | X201  | N-9  |
| CN314 | E-1   | D910  | G-8  | IC410  | D-4* | Q204 | M-6*  |        |      | X401  | B-3  |
| CN315 | B-1   | D1001 | Q-9* | IC411  | A-2  | Q205 | K-10* | RV2    | N-2  | X402  | E-6  |
| CN316 | A-2   | D1002 | Q-9* | IC412  | D-3* | Q401 | B-3   | RV401  | C-6  | X501  | L-4  |
| CN318 | A-6   | D1501 | K-3  | IC414  | D-3  | Q402 | D-3*  | RV402  | D-6  | X502  | K-1  |
| CN319 | A-4   |       |      | IC415  | D-3* | Q403 | D-5*  | RV403  | C-6  | X701  | C-5  |
| CN320 | A-3   | E1    | M-8  | IC416  | D-5  | Q404 | D-6*  | RV404  | C-6  |       |      |
| CN321 | G-2   | E2    | Q-1  | IC417  | D-6  | Q501 | L-3*  | RV410  | C-6  |       |      |
| CN322 | H-3   | E3    | R-2  | IC418  | E-6* | Q502 | J-3   | RV601  | F-2  |       |      |
| CN323 | H-4   | E401  | C-5  | IC419  | C-9  | Q503 | J-3   | RV602  | F-2  |       |      |
| CN324 | H-6   | E501  | K-2  | IC420  | E-6  | Q504 | K-4*  | RV603  | F-5  |       |      |
| CN325 | H-7   | E601  | G-1  | IC421  | L-7  | Q505 | K-4*  | RV701  | B-7  |       |      |
| CN326 | H-3   | E701  | A-3  | IC501  | M-2  | Q506 | J-4*  | RV702  | B-3  |       |      |
| CN327 | H-4   |       |      | IC502  | K-2  | Q507 | J-4*  | RV703  | A-2  |       |      |
| CN328 | H-7   |       |      | IC503  | L-4  | Q509 | J-5*  | RV802  | F-6  |       |      |
| CN329 | R-1   | IC2   | N-5  | IC504  | M-2* | Q510 | J-6*  | RV803  | F-6  |       |      |
| CN330 | A-6   | IC3   | R-6  | IC601  | F-3* | Q511 | J-2*  | RV804  | F-6  |       |      |
|       |       | IC4   | Q-3  | IC602  | F-2  | Q512 | K-3*  | RV805  | F-6  |       |      |
| COP1  | N-5   | IC5   | Q-6  | IC603  | C-4* | Q513 | J-3*  | RV901  | E-6  |       |      |
|       |       | IC6   | N-6  | IC604  | G-1* | Q514 | J-3*  | RV1001 | R-10 |       |      |
| COR1  | N-5   | IC8   | M-4  | IC605  | C-1* | Q602 | F-3*  |        |      |       |      |
|       |       | IC9   | N-7  | IC606  | F-2* | Q603 | F-3*  | S1     | N-5  |       |      |
| CV100 | P-3   | IC10  | P-3  | IC607  | G-6  | Q604 | F-3*  | S2     | F-5  |       |      |
|       |       | IC11  | Q-7  | IC701  | B-2* | Q605 | E-3*  | S3     | B-7  |       |      |
| D1    | M-4   | IC13  | K-7  | IC702  | C-4  | Q706 | A-4*  | S401   | C-2  |       |      |
| D2    | N-4*  | IC14  | R-9  | IC703  | B-7  | Q707 | A-5*  |        |      |       |      |
| D3    | M-4*  | IC15  | P-4  | IC704  | A-2* | Q708 | B-5*  | TP1    | B-7  |       |      |
| D5    | C-7   | IC16  | B-9  | IC705  | B-6  | Q709 | A-5*  | TP2    | P-8  |       |      |
| D6    | C-7   | IC17  | N-3  | IC706  | C-8  | Q710 | A-7   | TP3    | P-8  |       |      |
| D7    | M-6*  | IC18  | N-5  | IC707  | D-2  | Q711 | A-8   | TP11   | A-6  |       |      |
| D10   | L-6*  | IC19  | N-4  | IC801  | G-6* | Q712 | B-5*  | TP12   | B-6  |       |      |
| D11   | L-5*  | IC21  | P-8  | IC802  | F-3  | Q713 | B-6*  | TP15   | C-9  |       |      |
| D12   | M-2*  | IC22  | E-10 | IC803  | F-8* | Q714 | B-6*  | TP16   | C-9  |       |      |
| D13   | J-7*  | IC23  | C-10 | IC804  | G-7* | Q715 | B-6*  | TP18   | N-5  |       |      |
| D203  | N-3*  | IC51  | L-5  | IC805  | F-9  | Q716 | B-6*  | TP19   | M-6  |       |      |
| D204  | N-9*  | IC52  | Q-2  | IC806  | G-9  | Q717 | A-6*  | TP20   | M-6  |       |      |
| D206  | K-6*  | IC53  | P-2  | IC809  | G-7* | Q718 | A-6*  | TP26   | C-10 |       |      |
| D207  | N-10* | IC54  | Q-8  | IC901  | F-5  | Q719 | B-6*  | TP27   | C-10 |       |      |
| D401  | C-5*  | IC56  | J-7  | IC902  | D-8* | Q802 | G-2*  | TP28   | C-10 |       |      |
| D402  | D-6*  | IC57  | J-7  | IC903  | D-7* | Q803 | G-2   | TP29   | D-10 |       |      |
| D403  | C-6*  | IC100 | R-3  | IC904  | D-8  | Q804 | G-3   | TP30   | P-2  |       |      |
| D404  | C-5*  | IC101 | P-2  | IC905  | C-7  | Q809 | F-8*  | TP201  | P-9  |       |      |
| D405  | C-6*  | IC102 | M-7  | IC906  | G-1  | Q810 | G-9*  | TP401  | C-4  |       |      |
| D406  | C-6*  | IC103 | L-6  | IC1001 | Q-10 | Q811 | G-9*  | TP402  | D-4  |       |      |
| D407  | C-6*  | IC104 | M-7  | IC1002 | Q-10 | Q812 | E-5*  | TP403  | D-4  |       |      |
| D408  | C-6*  | IC105 | P-2  | IC1003 | R-10 | Q813 | F-5   | TP404  | F-6  |       |      |
| D410  | B-2   | IC201 | P-10 |        |      | Q814 | G-4   | TP405  | G-5  |       |      |
| D411  | C-9*  | IC202 | N-9  | PS1    | Q-1  | Q815 | G-4   | TP406  | E-3  |       |      |
| D502  | K-2*  | IC203 | N-7  | PS2    | C-7  | Q816 | G-4   | TP501  | H-5  |       |      |
| D503  | J-3*  | IC204 | J-8  | PS3    | Q-2  | Q817 | G-4   | TP601  | F-1  |       |      |
| D504  | J-4*  | IC208 | N-9  | PS501  | J-7  | Q818 | F-4   | TP602  | F-1  |       |      |
| D505  | J-5*  | IC209 | L-9  | PS701  | B-7  | Q819 | F-3   | TP603  | F-5  |       |      |
| D506  | K-4*  | IC210 | L-9  | PS801  | G-3  | Q901 | F-4   | TP604  | G-5  |       |      |
| D602  | E-3*  | IC211 | K-8  |        |      | Q902 | G-4   | TP701  | B-7  |       |      |
| D603  | E-3*  | IC212 | K-10 | Q1     | P-4* | Q903 | G-4   | TP702  | A-4  |       |      |

\* mark ; B SIDE mount

SST-2AP BOARD  
A Side

1-642-951-21 A SIDE

A Side is the same as Component Side



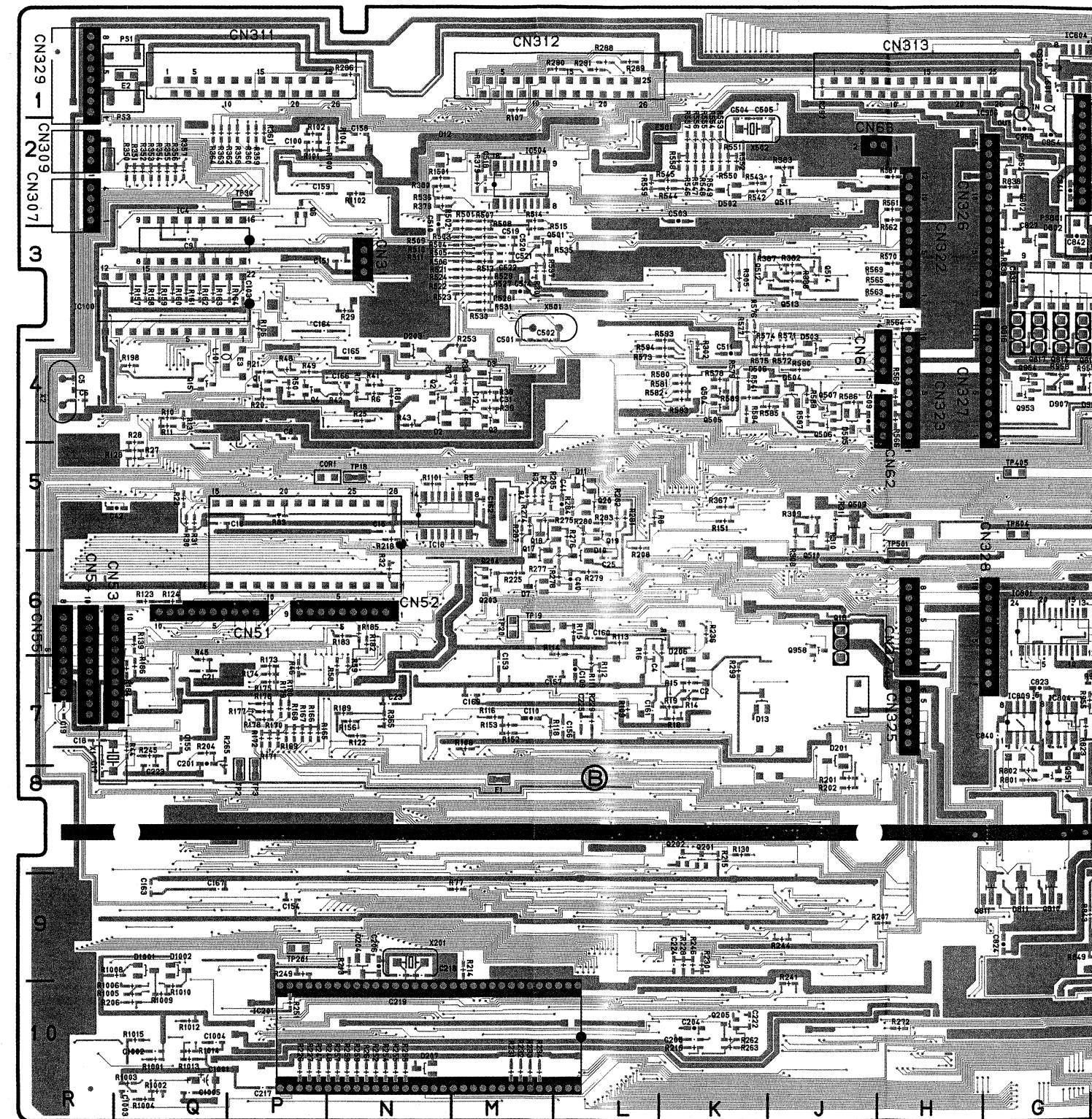




SST-2AP (1-642-951-21)

|       |       |       |      |        |      |      |       |        |      |       |      |
|-------|-------|-------|------|--------|------|------|-------|--------|------|-------|------|
| CN5   | A-5   | D604  | F-3* | IC213  | J-10 | Q2   | N-4*  | Q904   | E-6* | TP703 | B-4  |
| CN31  | N-3   | D605  | F-2* | IC214  | K-6  | Q3   | M-4*  | Q905   | E-6  | TP704 | A-2* |
| CN51  | P-6   | D701  | A-7  | IC216  | P-10 | Q4   | P-4*  | Q906   | D-7* | TP801 | F-6  |
| CN52  | N-6   | D802  | G-3* | IC217  | H-9  | Q6   | P-2*  | Q907   | D-8* | TP802 | E-6  |
| CN53  | Q-6   | D810  | G-9  | IC219  | J-10 | Q8   | C-2   | Q908   | F-9  | TP803 | E-7  |
| CN54  | R-6   | D811  | G-9* | IC220  | J-9  | Q15  | Q-4*  | Q909   | F-9  | TP901 | E-7  |
| CN55  | R-6   | D901  | D-7  | IC221  | K-9  | Q16  | J-6   | Q950   | F-7  | TP902 | E-5  |
| CN61  | J-4   | D902  | F-5  | IC401  | C-2* | Q17  | M-6*  | Q951   | G-8* | TP903 | C-2  |
| CN62  | J-4   | D903  | G-5  | IC402  | C-2  | Q18  | M-5*  | Q952   | G-2* | TP904 | F-9  |
| CN63  | H-2   | D904  | E-7* | IC403  | D-2  | Q19  | L-5*  | Q953   | G-4* | TP905 | F-9  |
| CN307 | R-3   | D905  | E-6  | IC404  | B-2* | Q20  | L-5*  | Q954   | G-4* |       |      |
| CN309 | R-2   | D906  | F-4* | IC405  | D-3  | Q21  | P-1   | Q955   | C-8* | X1    | R-7  |
| CN311 | P-1   | D907  | G-4* | IC406  | C-4* | Q201 | K-8*  | Q956   | E-9* | X2    | R-4  |
| CN312 | L-1   | D908  | F-4* | IC408  | B-2  | Q202 | K-8*  | Q957   | E-8* | X3    | B-10 |
| CN313 | H-1   | D909  | C-7* | IC409  | B-3* | Q203 | M-6*  | Q958   | J-6* | X201  | N-9  |
| CN314 | E-1   | D910  | G-8  | IC410  | D-4* | Q204 | M-6*  |        |      | X401  | B-3  |
| CN315 | B-1   | D1001 | Q-9* | IC411  | A-2  | Q205 | K-10* | RV2    | N-2  | X402  | E-6  |
| CN316 | A-2   | D1002 | Q-9* | IC412  | D-3* | Q401 | B-3   | RV401  | C-6  | X501  | L-4  |
| CN318 | A-6   | D1501 | K-3  | IC414  | D-3  | Q402 | D-3*  | RV402  | D-6  | X502  | K-1  |
| CN319 | A-4   |       |      | IC415  | D-3* | Q403 | D-5*  | RV403  | C-6  | X701  | C-5  |
| CN320 | A-3   | E1    | M-8  | IC416  | D-5  | Q404 | D-6*  | RV404  | C-6  |       |      |
| CN321 | G-2   | E2    | Q-1  | IC417  | D-6  | Q501 | L-3*  | RV410  | C-6  |       |      |
| CN322 | H-3   | E3    | R-2  | IC418  | E-6* | Q502 | J-3   | RV601  | F-2  |       |      |
| CN323 | H-4   | E401  | C-5  | IC419  | C-9  | Q503 | J-3   | RV602  | F-2  |       |      |
| CN324 | H-6   | E501  | K-2  | IC420  | E-6  | Q504 | K-4*  | RV603  | F-5  |       |      |
| CN325 | H-7   | E601  | G-1  | IC421  | L-7  | Q505 | K-4*  | RV701  | B-7  |       |      |
| CN326 | H-3   | E701  | A-3  | IC501  | M-2  | Q506 | J-4*  | RV702  | B-3  |       |      |
| CN327 | H-4   |       |      | IC502  | K-2  | Q507 | J-4*  | RV703  | A-2  |       |      |
| CN328 | H-7   |       |      | IC503  | L-4  | Q509 | J-5*  | RV802  | F-6  |       |      |
| CN329 | R-1   |       |      | IC504  | M-2* | Q510 | J-6*  | RV803  | F-6  |       |      |
| CN330 | A-6   |       |      | IC601  | F-3* | Q511 | J-2*  | RV804  | F-6  |       |      |
|       |       |       |      | IC602  | F-2  | Q512 | K-3*  | RV805  | F-6  |       |      |
| COP1  | N-5   |       |      | IC603  | C-4* | Q513 | J-3*  | RV901  | E-6  |       |      |
|       |       |       |      | IC604  | G-1* | Q514 | J-3*  | RV1001 | R-10 |       |      |
| COR1  | N-5   |       |      | IC605  | C-1* | Q602 | F-3*  |        |      |       |      |
|       |       |       |      | IC606  | F-2* | Q603 | F-3*  | S1     | N-5  |       |      |
| CV100 | P-3   |       |      | IC607  | G-6  | Q604 | F-3*  | S2     | F-5  |       |      |
|       |       |       |      | IC701  | B-2* | Q605 | E-3*  | S3     | B-7  |       |      |
|       |       |       |      | IC702  | C-4  | Q706 | A-4*  | S401   | C-2  |       |      |
| D1    | M-4   |       |      | IC703  | B-7  | Q707 | A-5*  |        |      |       |      |
| D2    | N-4*  |       |      | IC704  | A-2* | Q708 | B-5*  | TP1    | B-7  |       |      |
| D3    | M-4*  |       |      | IC705  | B-6  | Q709 | A-5*  | TP2    | P-8  |       |      |
| D5    | C-7   |       |      | IC706  | C-8  | Q710 | A-7   | TP3    | P-8  |       |      |
| D6    | C-7   |       |      | IC707  | D-2  | Q711 | A-8   | TP11   | A-6  |       |      |
| D7    | M-6*  |       |      | IC801  | G-6* | Q712 | B-5*  | TP12   | B-6  |       |      |
| D10   | L-6*  |       |      | IC802  | F-3  | Q713 | B-6*  | TP15   | C-9  |       |      |
| D11   | L-5*  |       |      | IC803  | F-8* | Q714 | B-6*  | TP16   | C-9  |       |      |
| D12   | M-2*  |       |      | IC804  | G-7* | Q715 | B-6*  | TP18   | N-5  |       |      |
| D13   | J-7*  |       |      | IC805  | F-9  | Q716 | B-6*  | TP19   | M-6  |       |      |
| D203  | N-3*  |       |      | IC806  | G-9  | Q717 | A-6*  | TP20   | M-6  |       |      |
| D204  | N-9*  |       |      | IC809  | G-7* | Q718 | A-6*  | TP26   | C-10 |       |      |
| D206  | K-6*  |       |      | IC901  | F-5  | Q719 | B-6*  | TP27   | C-10 |       |      |
| D207  | N-10* |       |      | IC902  | D-8* | Q802 | G-2*  | TP28   | C-10 |       |      |
| D401  | C-5*  |       |      | IC903  | D-7* | Q803 | G-2   | TP29   | D-10 |       |      |
| D402  | D-6*  |       |      | IC904  | D-8  | Q804 | G-3   | TP30   | P-2  |       |      |
| D403  | C-6*  |       |      | IC905  | C-7  | Q809 | F-8*  | TP201  | P-9  |       |      |
| D404  | C-5*  |       |      | IC906  | G-1  | Q810 | G-9*  | TP401  | C-4  |       |      |
| D405  | C-6*  |       |      | IC1001 | Q-10 | Q811 | G-9*  | TP402  | D-4  |       |      |
| D406  | C-6*  |       |      | IC1002 | Q-10 | Q812 | E-5*  | TP403  | D-4  |       |      |
| D407  | C-6*  |       |      | IC1003 | R-10 | Q813 | F-5   | TP404  | F-6  |       |      |
| D408  | C-6*  |       |      |        |      | Q814 | G-4   | TP405  | G-5  |       |      |
| D410  | B-2   |       |      |        |      | Q815 | G-4   | TP406  | E-3  |       |      |
| D411  | C-9*  |       |      |        |      | Q816 | G-4   | TP501  | H-5  |       |      |
| D502  | K-2*  |       |      |        |      | Q817 | G-4   | TP601  | F-1  |       |      |
| D503  | J-3*  |       |      |        |      | Q818 | F-4   | TP602  | F-1  |       |      |
| D504  | J-4*  |       |      |        |      | Q819 | F-3   | TP603  | F-5  |       |      |
| D505  | J-5*  |       |      |        |      | Q901 | F-4   | TP604  | G-5  |       |      |
| D506  | K-4*  |       |      |        |      | Q902 | G-4   | TP701  | B-7  |       |      |
| D602  | E-3*  |       |      |        |      | Q903 | G-4   | TP702  | A-4  |       |      |
| D603  | E-3*  |       |      |        |      |      |       |        |      |       |      |

\* mark ; B SIDE mount

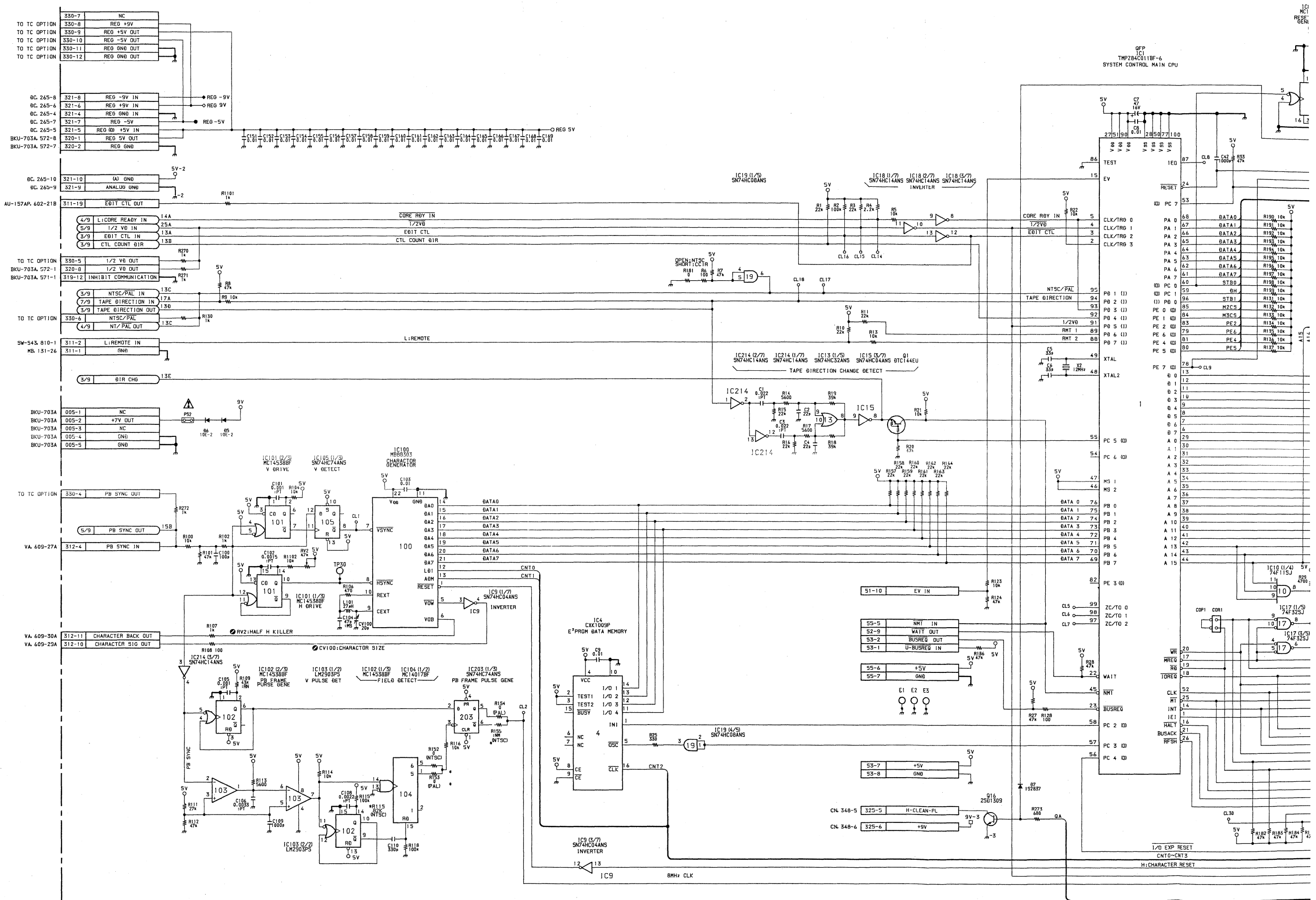
SST-2AP BOARD  
B Side

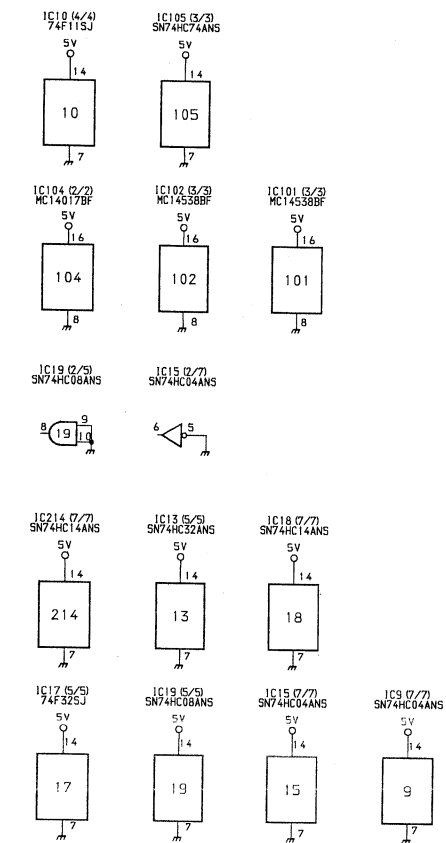
1-642-951-21 B SIDE

B Side is the same as Soldering Side





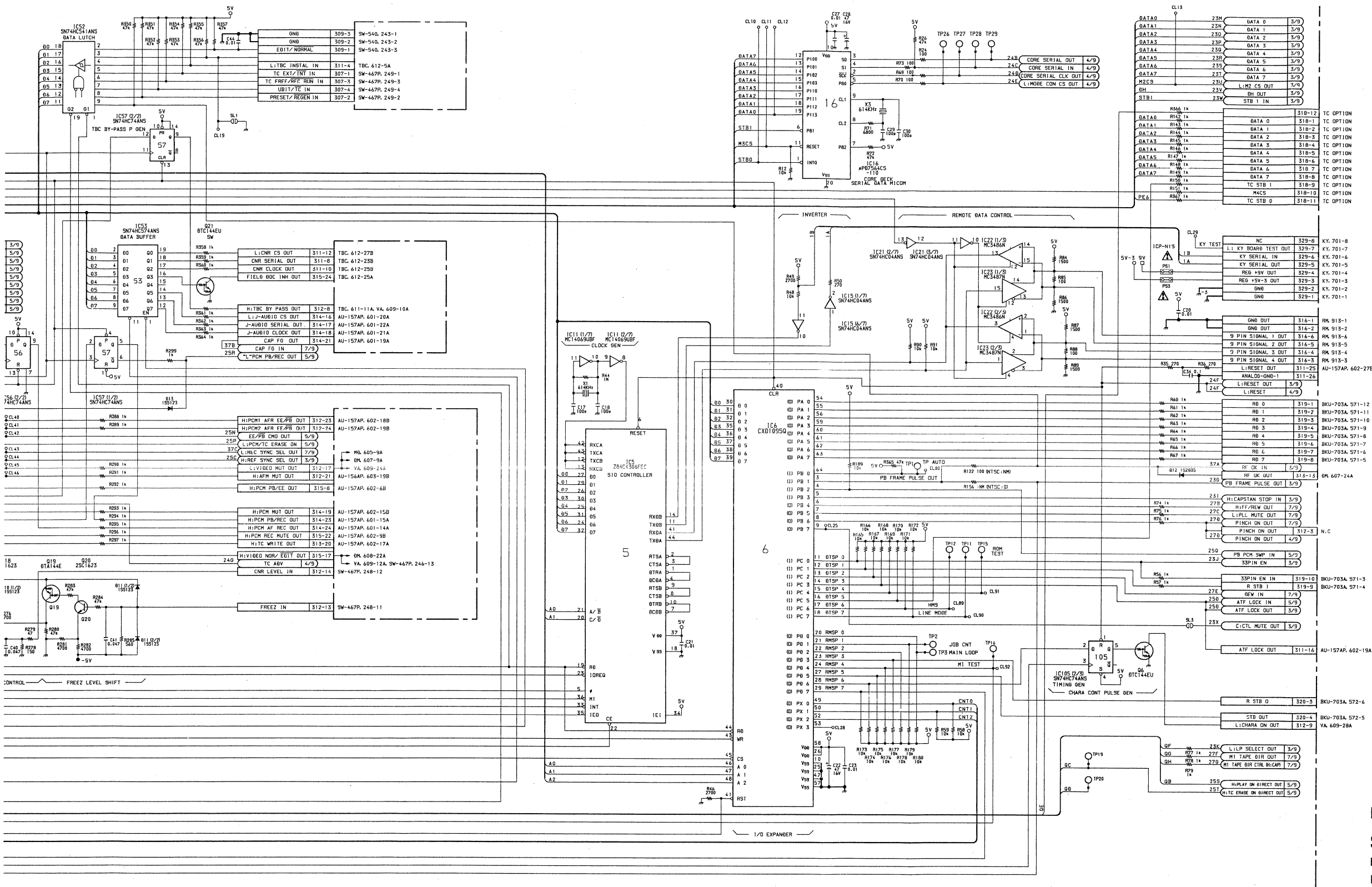




EVO-9850P (EK) : #10001 —

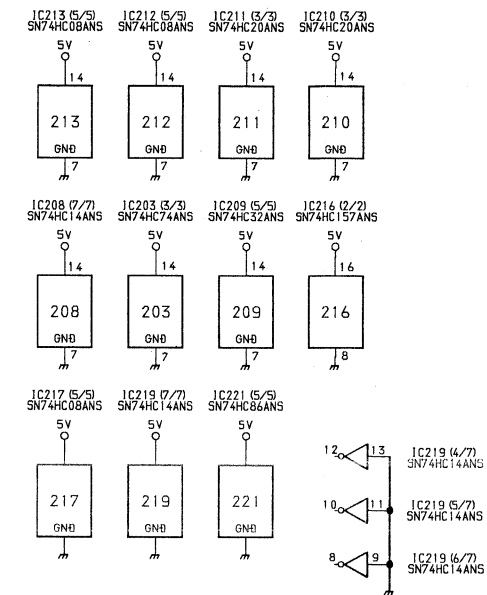






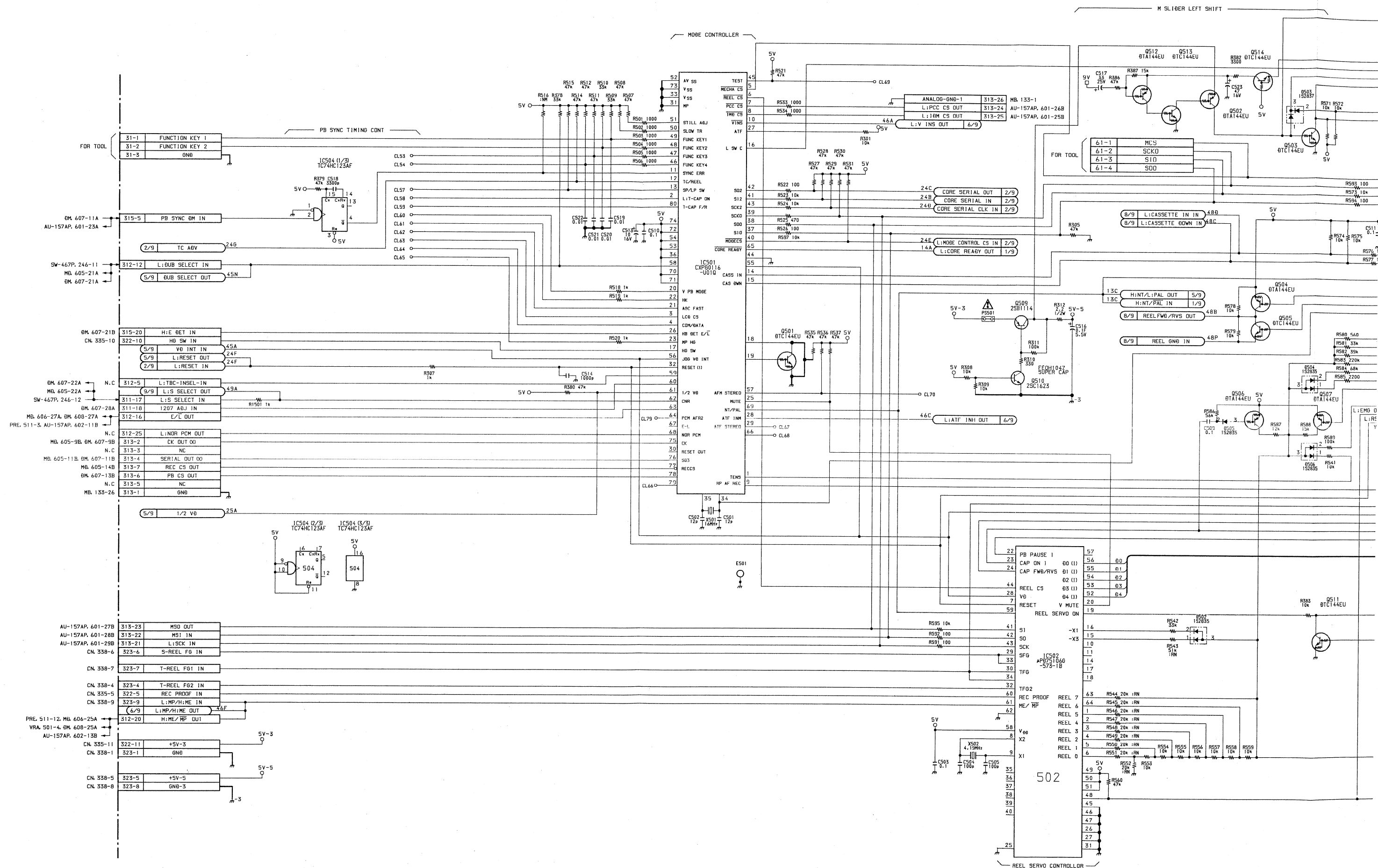


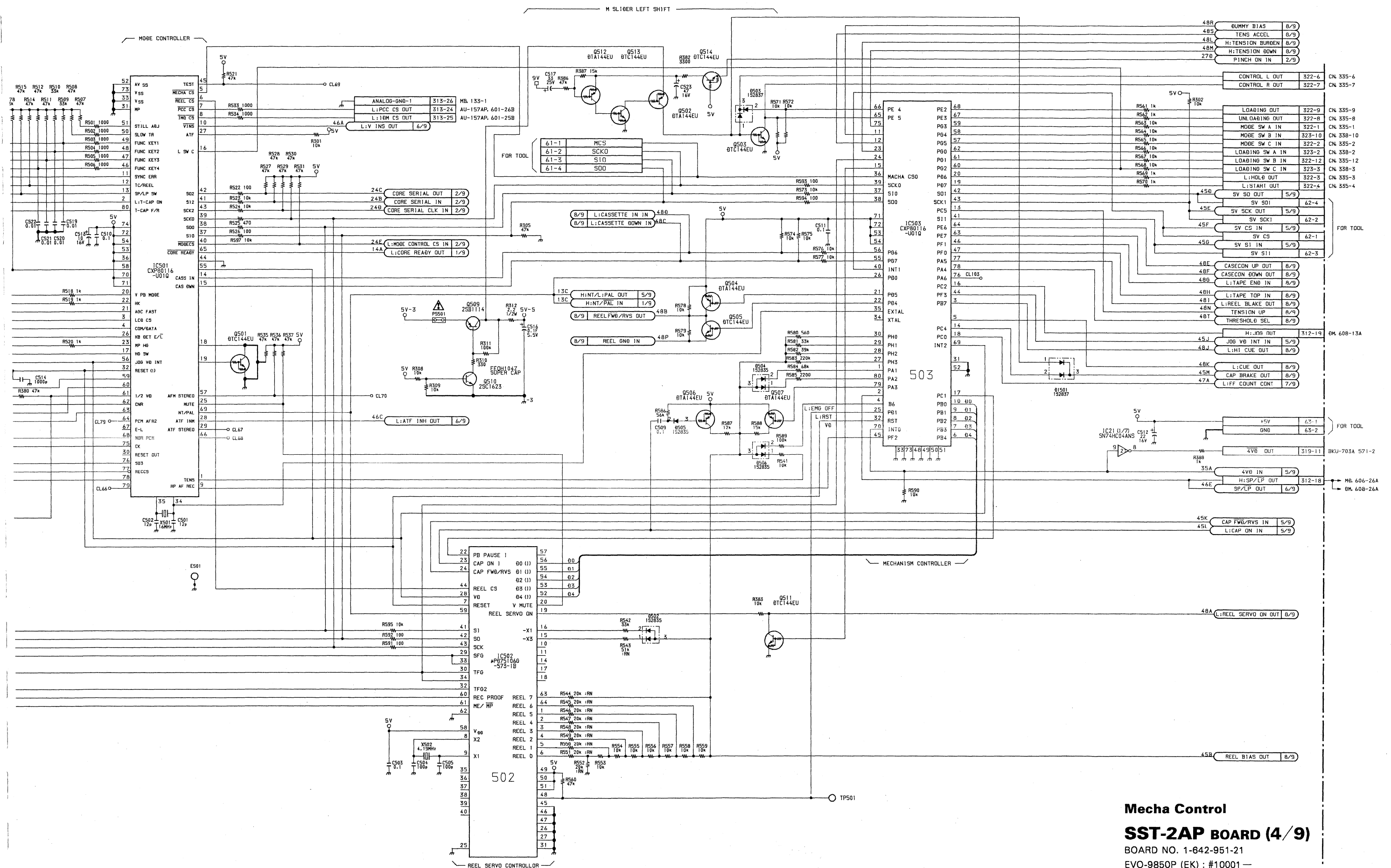


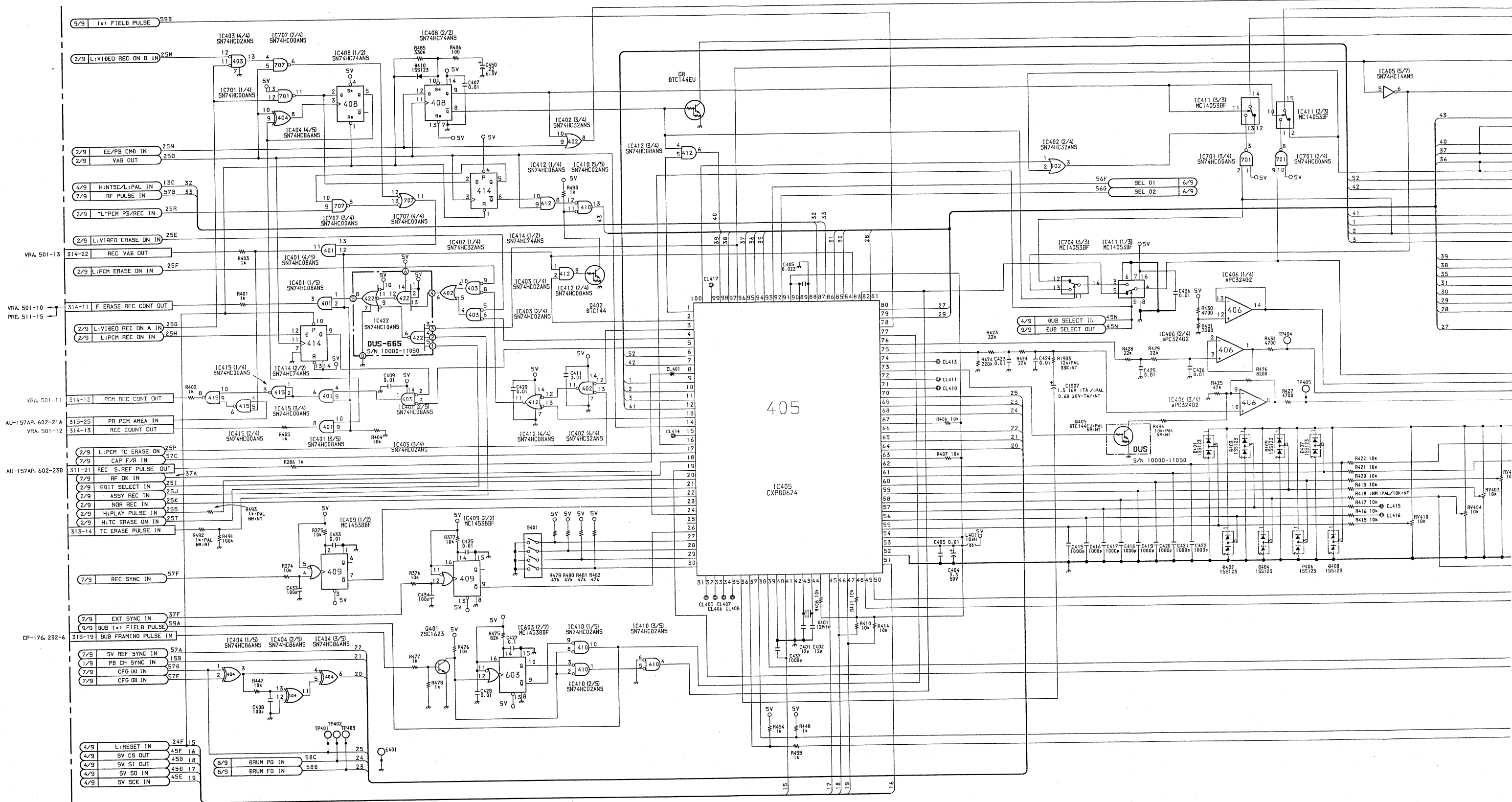


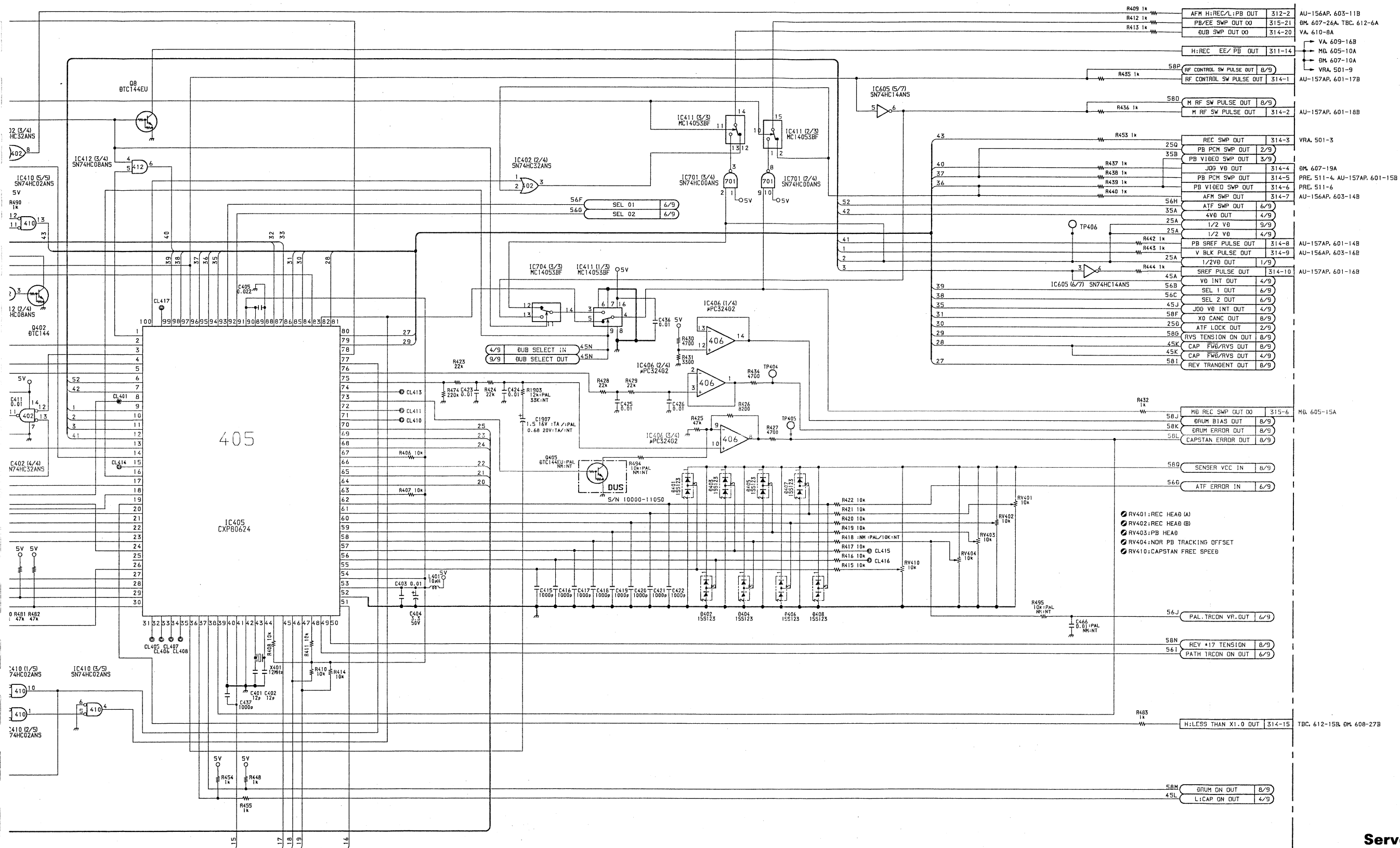
## SST-2AP BOARD (3/9)

BOARD NO. 1-642-951-21  
EVO-9850P (EK) : #10001 —







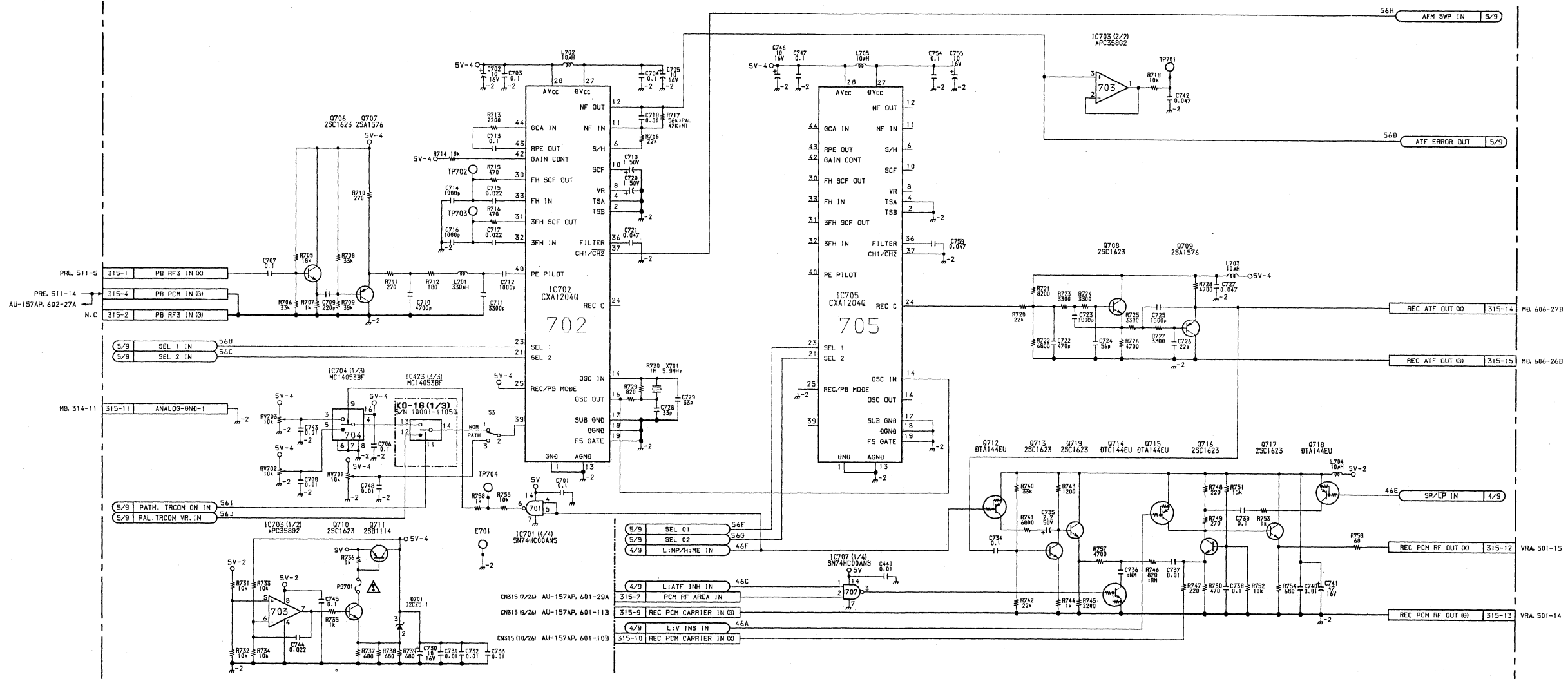


## Servo Control

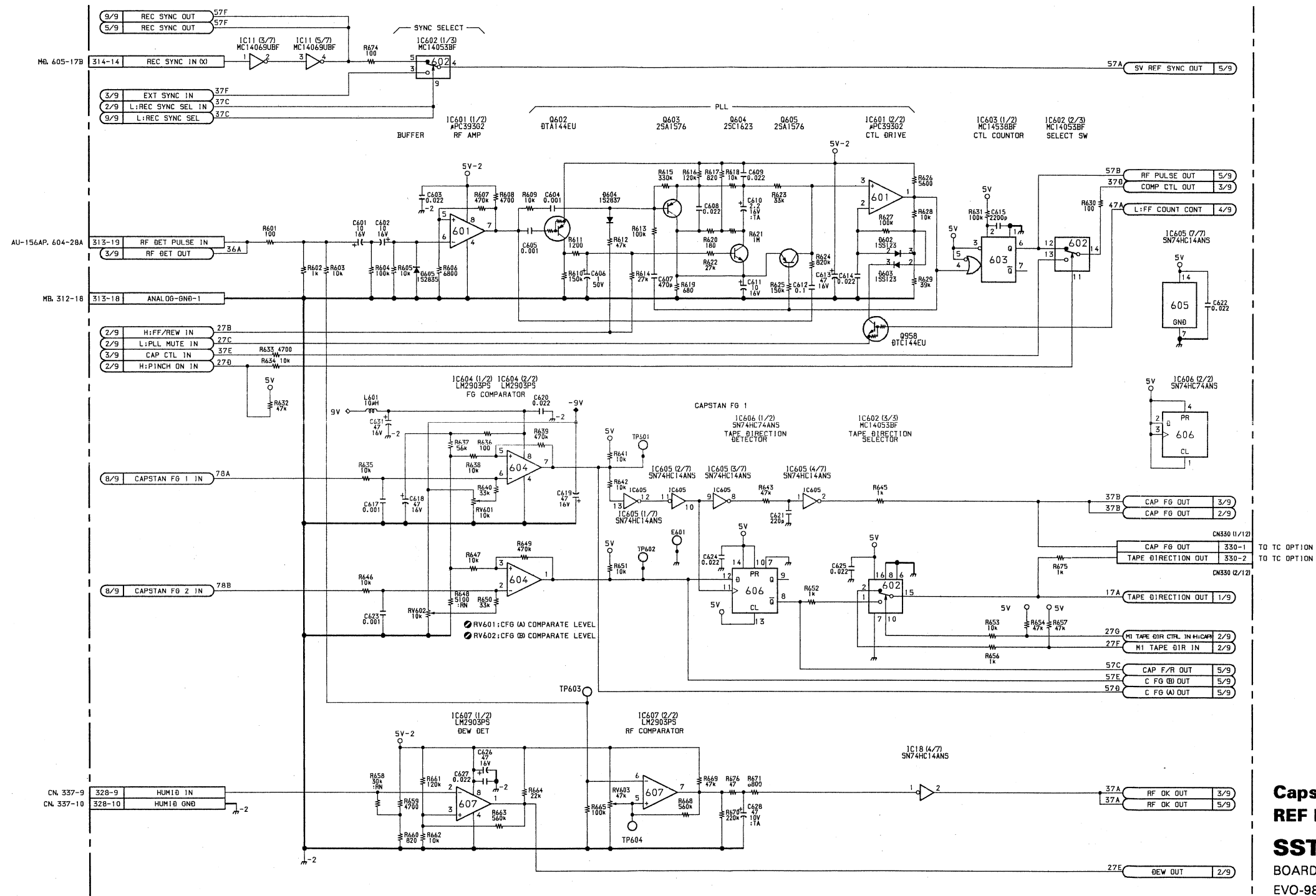
## SST-2AP BOARD (5/9)

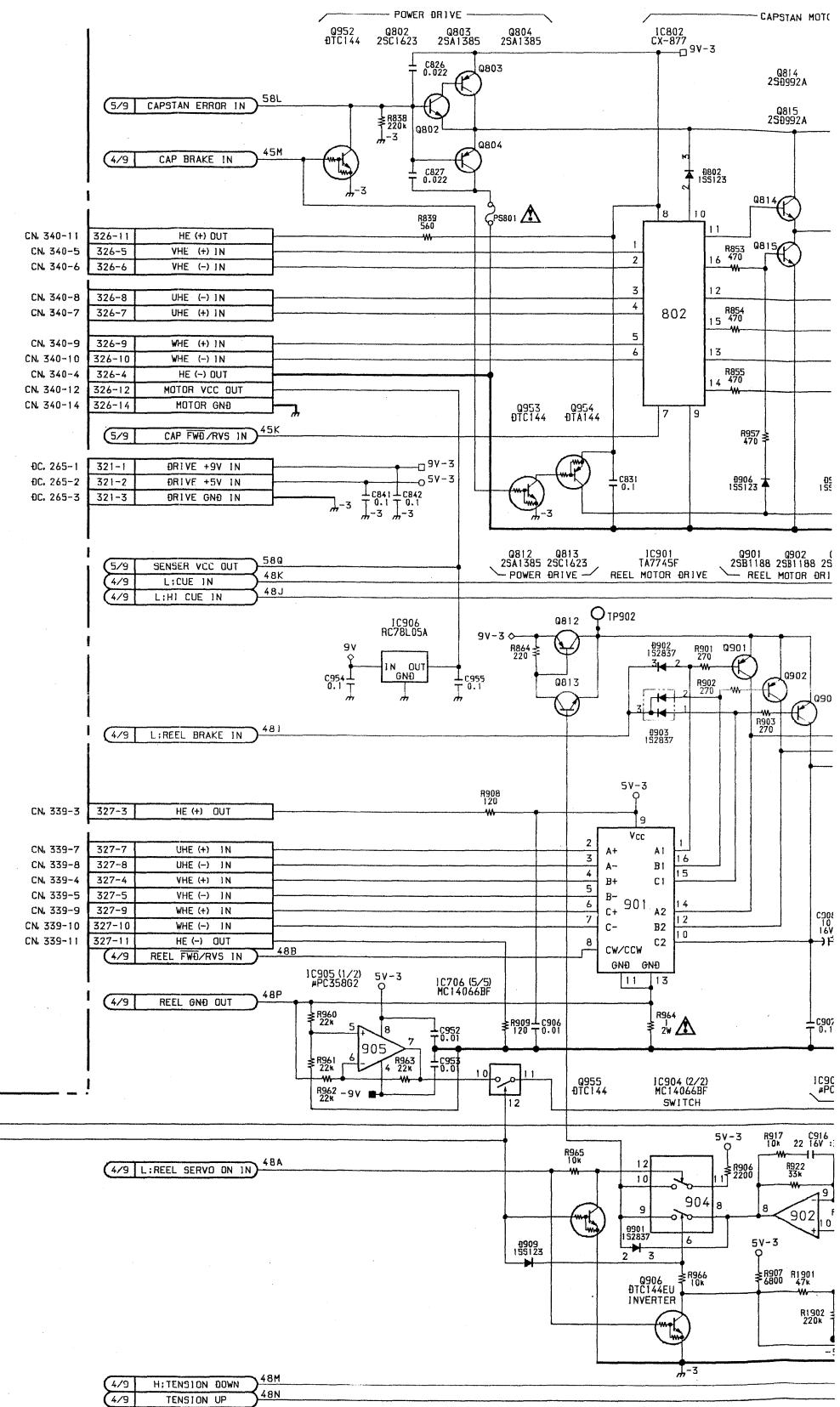
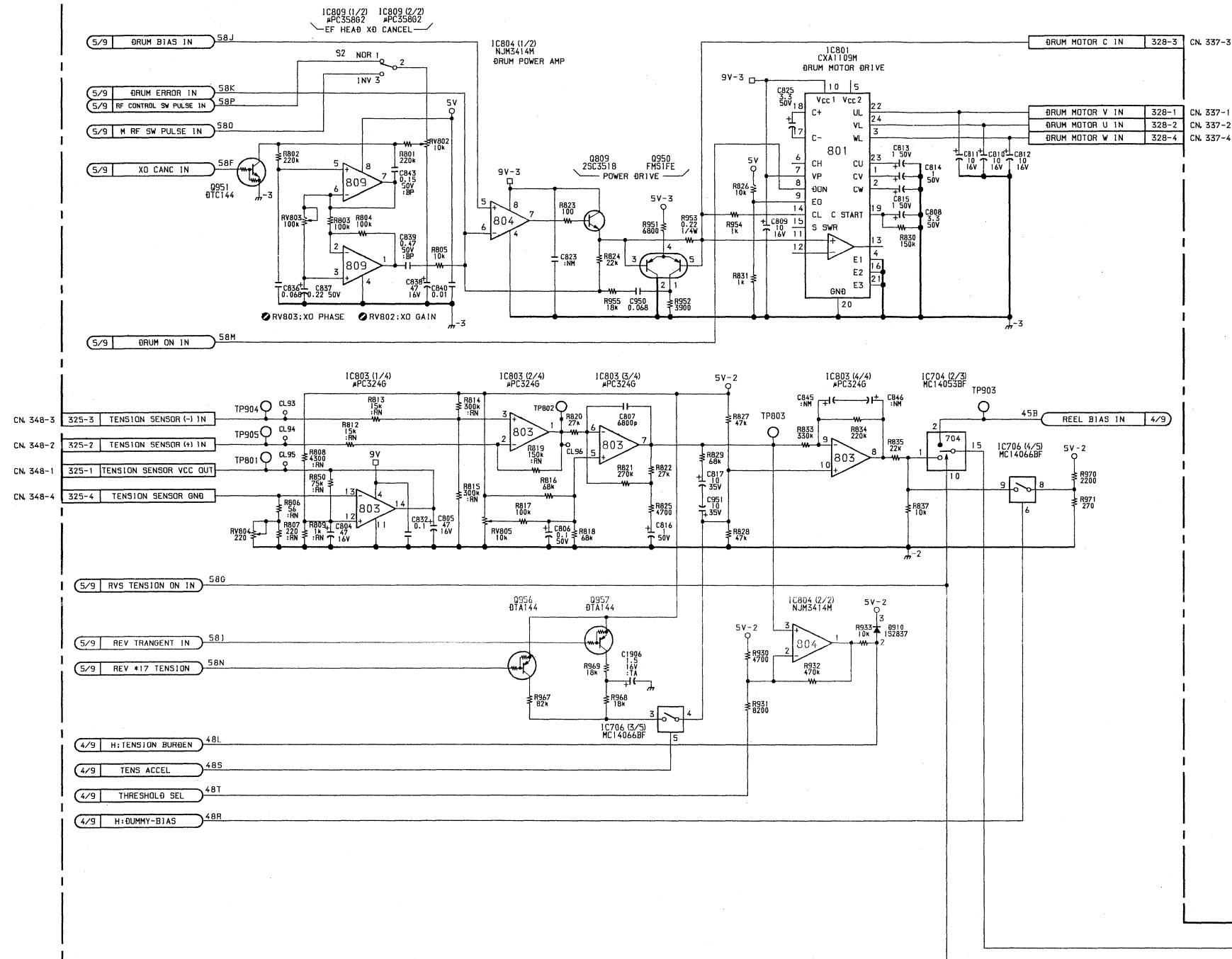
BOARD NO. 1-642-951-21

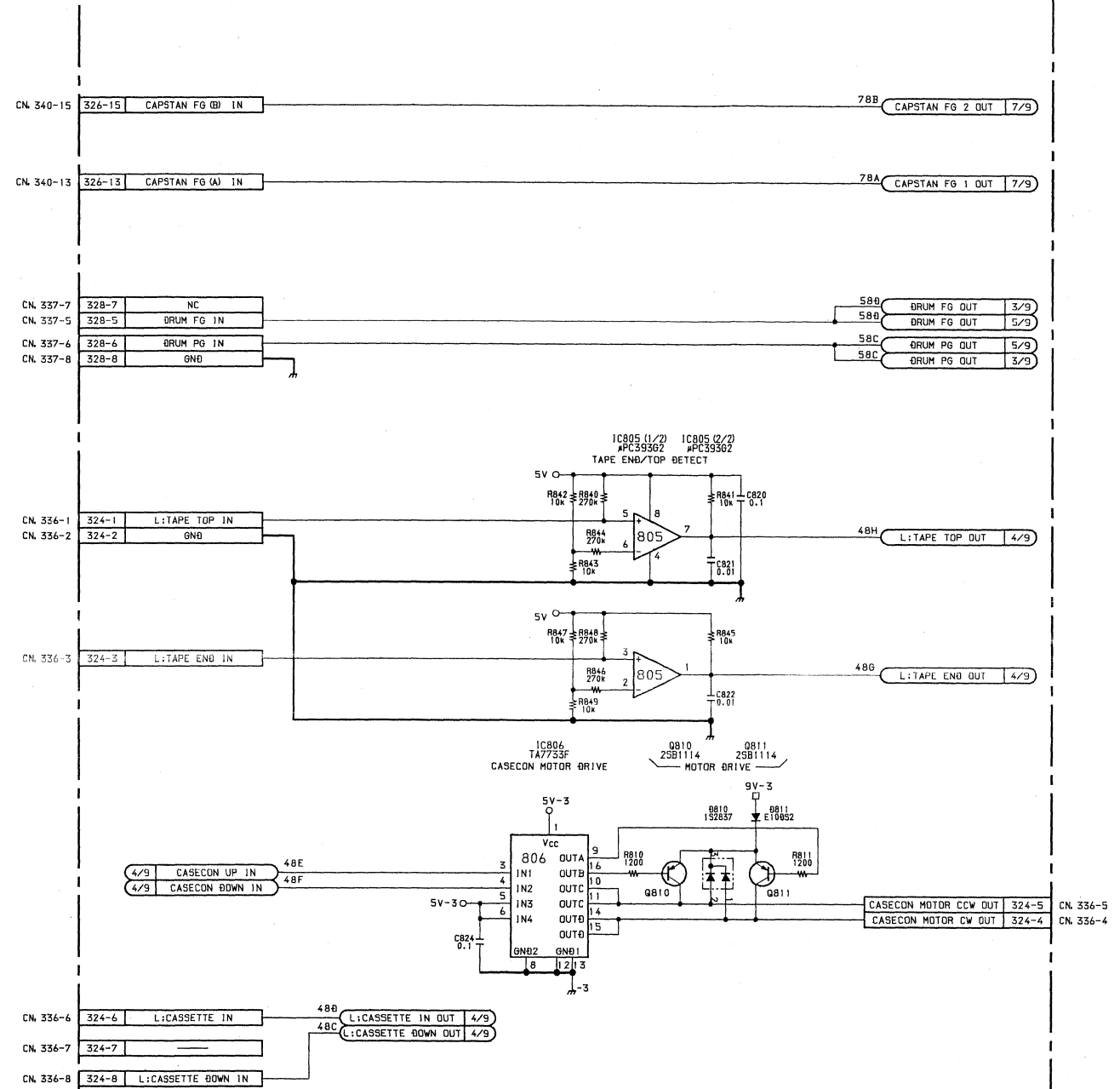
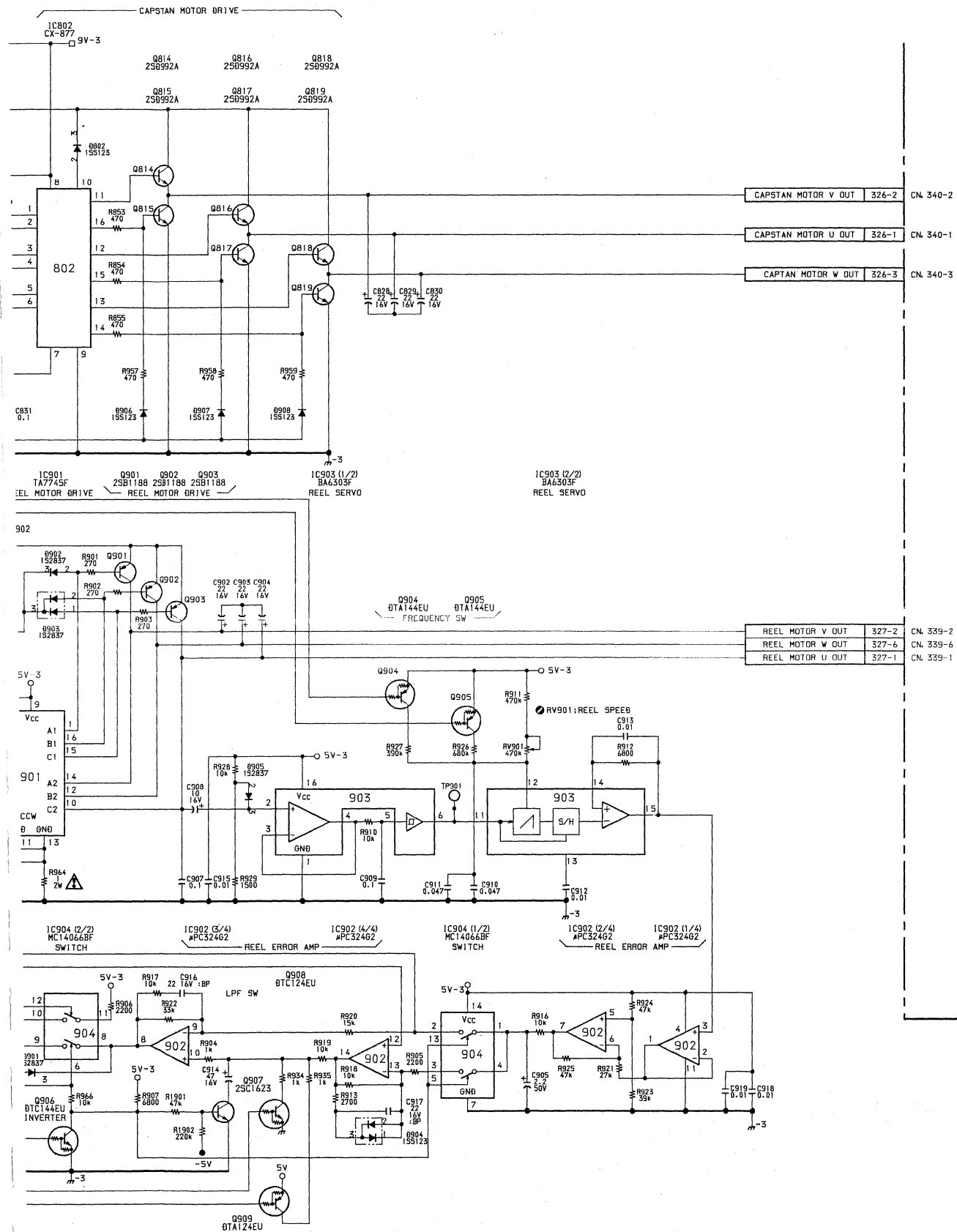
EVO-9850P (EK) : #10001—







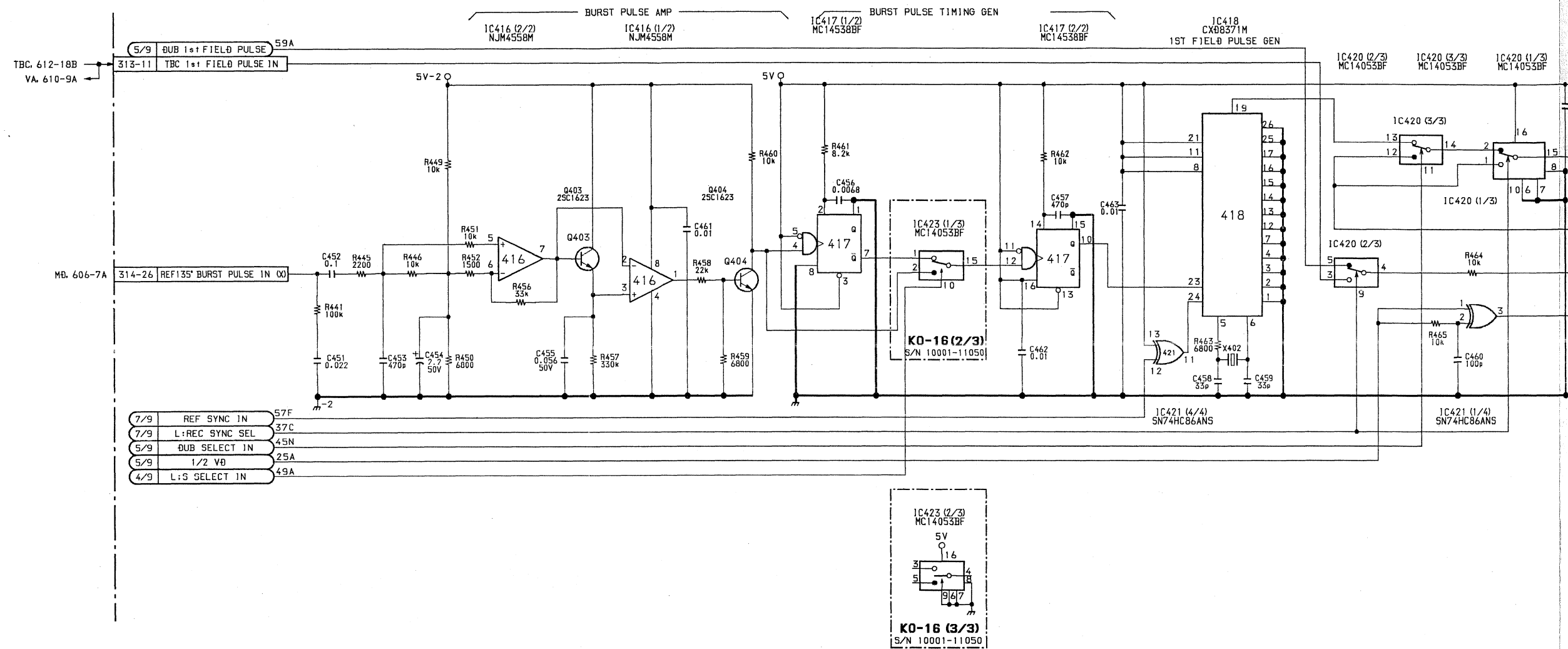


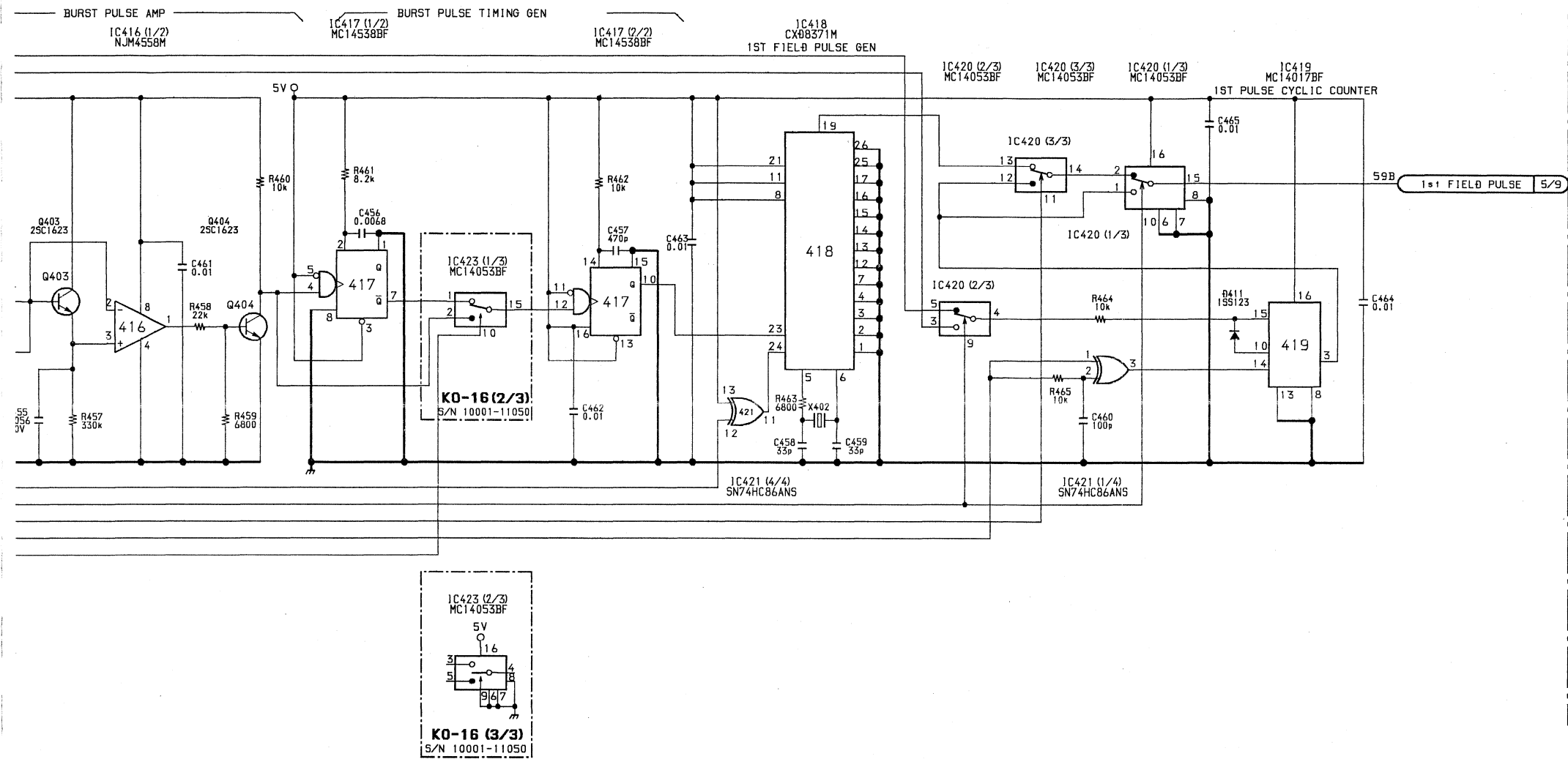


## Motor Drive

## SST-2AP BOARD (8/9)

BOARD NO. 1-642-951-21  
EVO-9850P (EK) : #10001 —





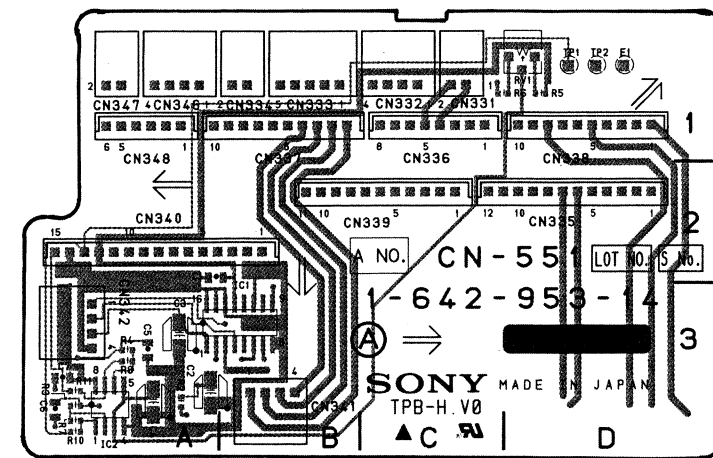
# 1st Field Pulse Genelator

## SST-2AP BOARD (9/9)

BOARD NO. 1-642-951-21  
EVO-9850P (EK) : #10001 —

## CN-551P BOARD

## A Side

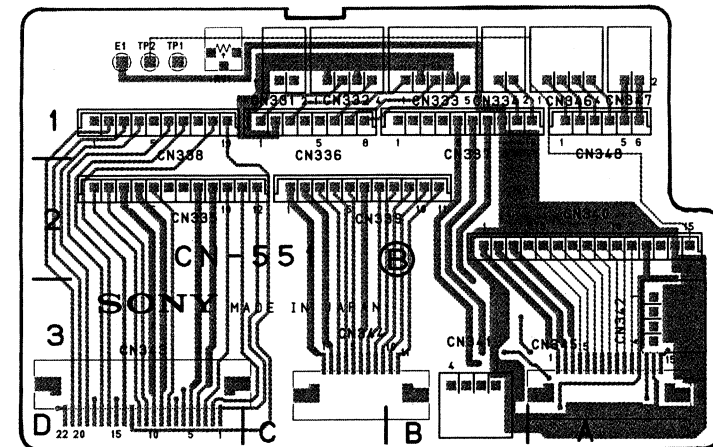


1-642-953-14 A SIDE

A Side is the same as Component Side

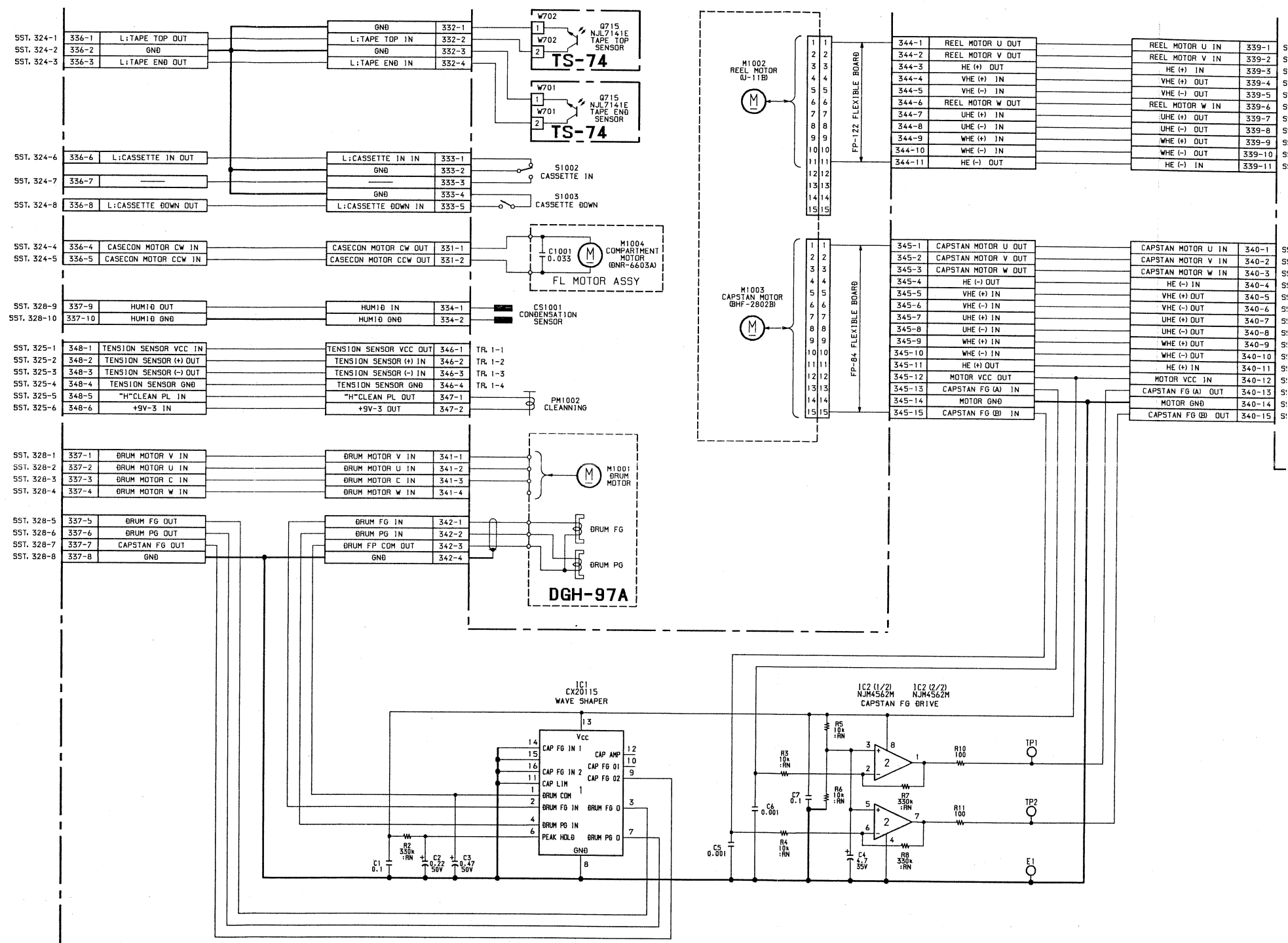
## CN-551P BOARD

## B Side



1-642-953-14 B SIDE

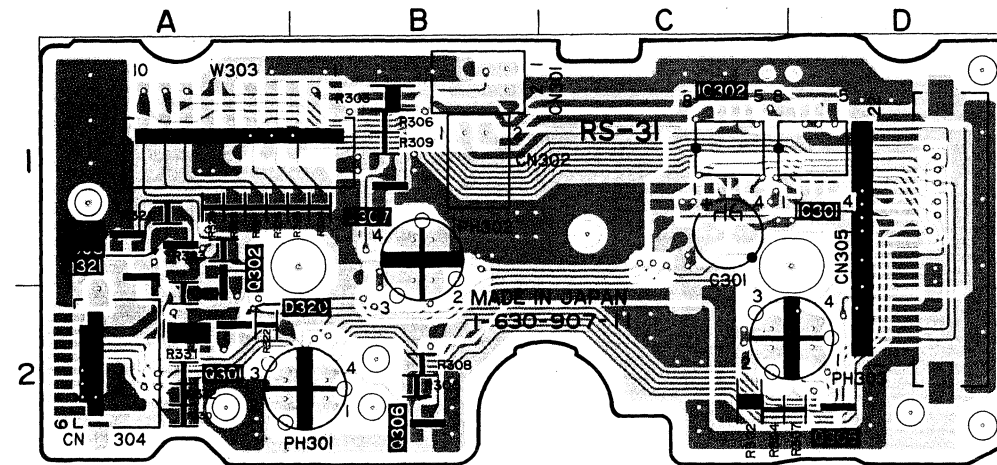
B Side is the same as Soldering Side





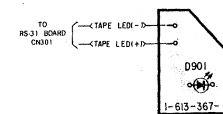


## RS-31 BOARD Component Side

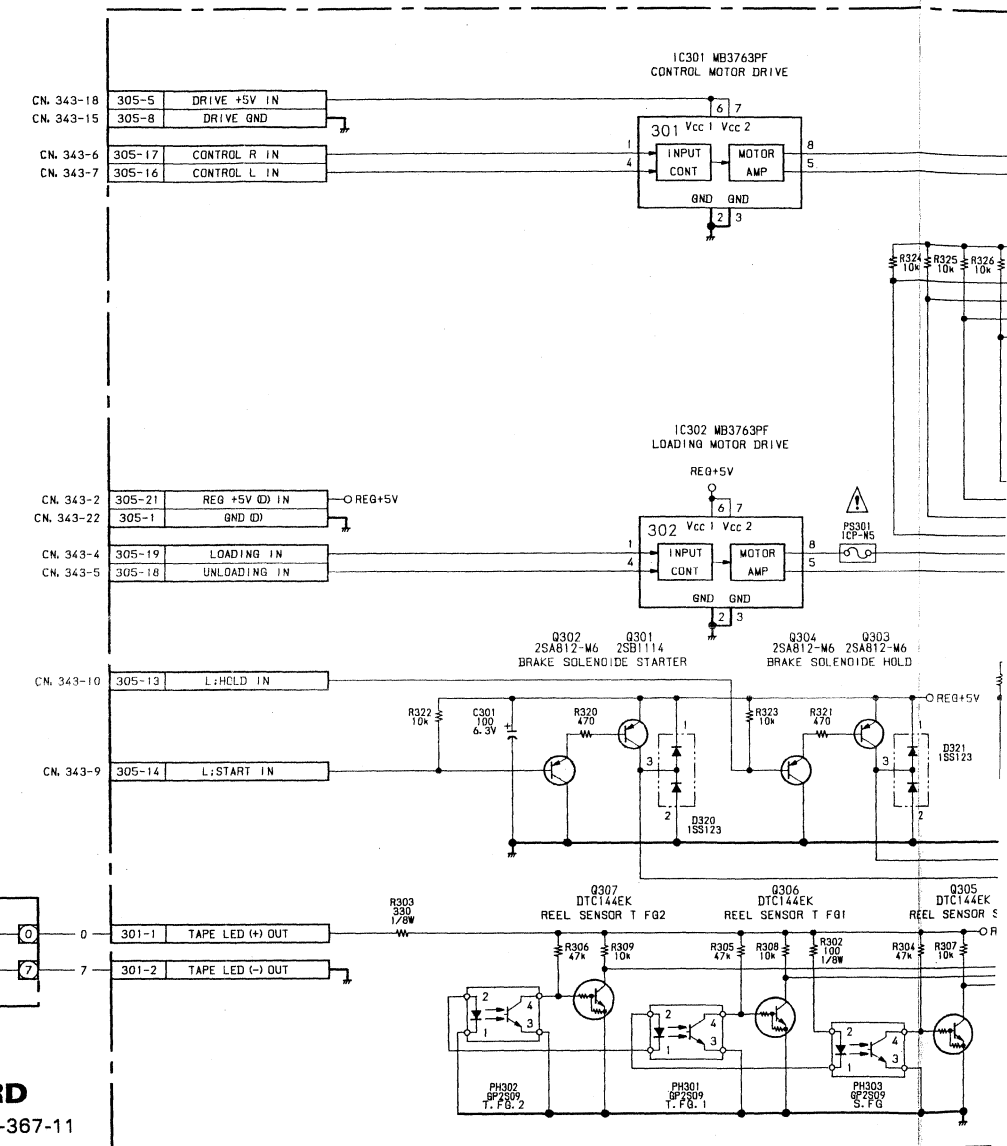


1-630-907-11 COMPONENT SIDE

**LD-1 BOARD**  
**Solder Side**



1-613-367-11 SOLDER SIDE



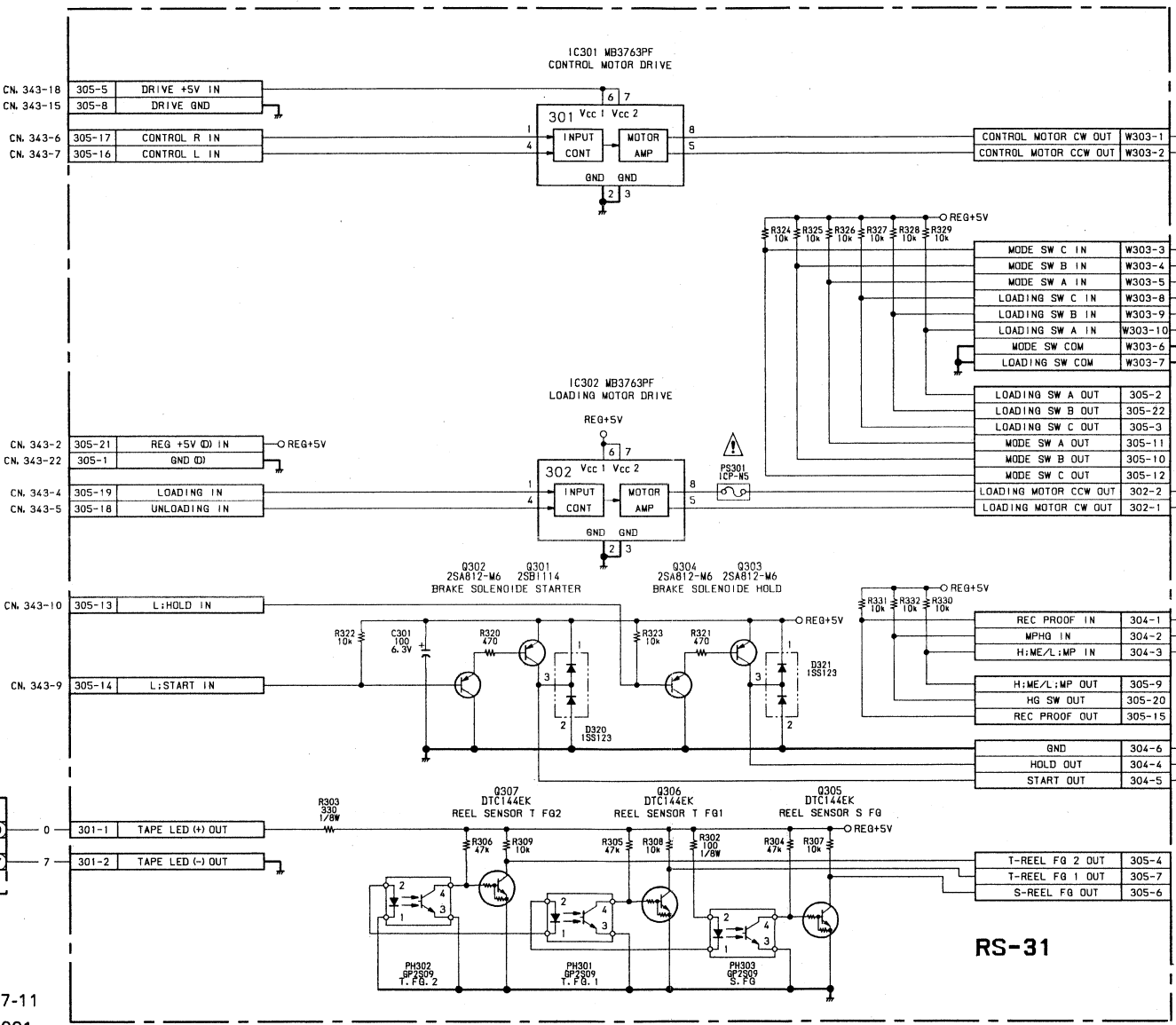
## Tape Sensor

## LD-1 BOARD

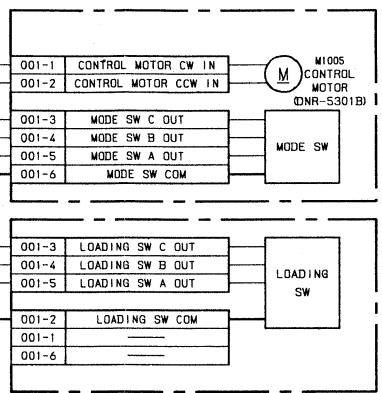
BOARD NO. 1-613-367-11

EVO-9850P (EK) : #10001 —

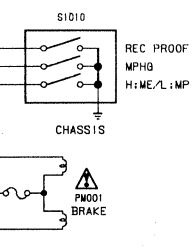
**Tape Sensor**  
**LD-1 BOARD**  
BOARD NO. 1-613-367-11  
EVO-9850P (EK) : #10001—



**Mode Switch**  
**MS-36 BOARD**  
BOARD NO. 1-641-021-11  
EVO-9850P (EK) : #10001—



**Loading Sensor**  
**LM-22 BOARD**  
BOARD NO. 1-641-022-11  
EVO-9850P (EK) : #10001—



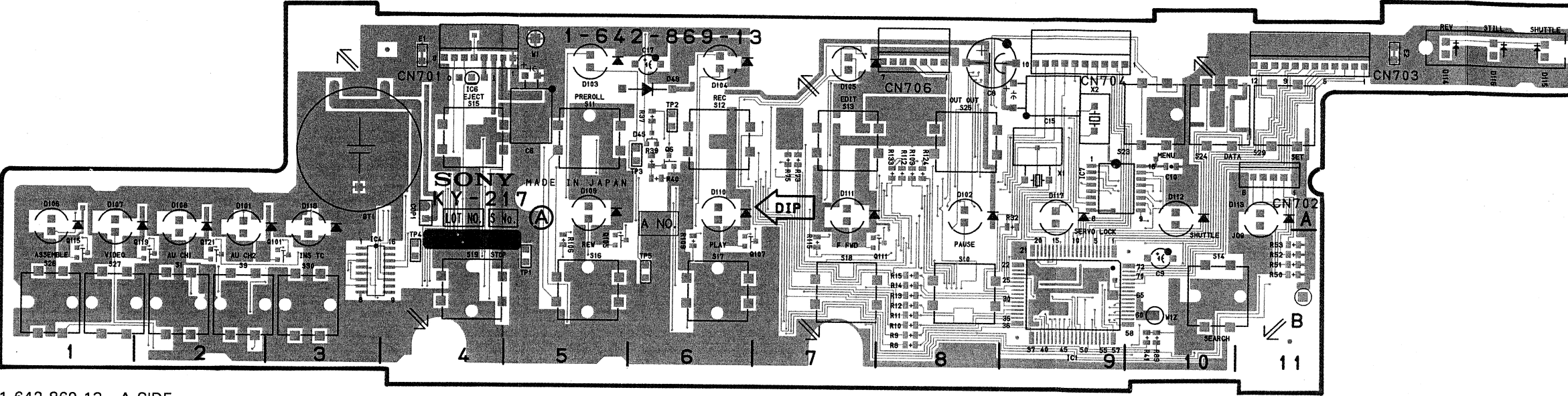
**Mechanical Control**  
**RS-31 BOARD**  
BOARD NO. 1-630-907-11  
EVO-9850P (EK) : #10001—

RS-31

KY-217 (1-642-869-13)

|       |       |                       |      |
|-------|-------|-----------------------|------|
| BT1   | A-3   | Q106                  | B-6* |
|       |       | Q107                  | B-6  |
| CN701 | A-4   | Q108                  | A-8* |
| CN702 | A-11  | Q109                  | A-8* |
| CN703 | A-11  | Q110                  | B-7* |
| CN704 | A-9   | Q111                  | B-7  |
| CN706 | A-8   | Q112                  | A-7* |
|       |       | Q113                  | A-7* |
| COP1  | A-4   | Q114                  | B-1* |
|       |       | Q115                  | B-1  |
| D1    | B-2*  | Q116                  | A-8* |
| D9    | B-2*  | Q117                  | A-8* |
| D10   | B-8*  | Q118                  | B-1* |
| D11   | A-5*  | Q119                  | B-1  |
| D13   | A-7*  | Q120                  | B-2* |
| D14   | B-10* | Q121                  | B-2  |
| D15   | A-4*  | Q122                  | A-8* |
| D17   | B-6*  | Q123                  | A-8* |
| D19   | B-4*  | Q124                  | B-7* |
| D23   | A-10* |                       |      |
| D24   | A-10* | S1                    | B-2  |
| D25   | A-8*  | S9                    | B-2  |
| D26   | B-1*  | S10                   | B-8  |
| D29   | A-11* | S11                   | A-5  |
| D30   | B-3*  | S12                   | A-6  |
| D45   | A-6*  | S13                   | A-7  |
| D48   | A-6   | S14                   | B-10 |
| D49   | A-4*  | S15                   | A-4  |
| D50   | A-4*  | S16                   | B-5  |
| D51   | A-4*  | S17                   | B-6  |
| D52   | B-10* | S18                   | A-7  |
| D54   | A-6*  | S19                   | B-4  |
| D101  | A-2   | S23                   | A-9  |
| D102  | A-8   | S24                   | A-10 |
| D103  | A-5   | S25                   | A-8  |
| D104  | A-6   | S26                   | B-1  |
| D105  | A-7   | S27                   | B-1  |
| D106  | A-1   | S29                   | A-11 |
| D107  | A-1   | S30                   | B-3  |
| D108  | A-2   |                       |      |
| D109  | A-5   | X1                    | A-9  |
| D110  | A-6   | X2                    | A-9  |
| D111  | A-7   |                       |      |
| D112  | A-10  | * mark ; B SIDE mount |      |
| D113  | A-11  |                       |      |
| D114  | A-11  |                       |      |
| D115  | A-11  |                       |      |
| D116  | A-11  |                       |      |
| D117  | A-9   |                       |      |
| D118  | A-3   |                       |      |
| IC1   | B-9   |                       |      |
| IC4   | B-3   |                       |      |
| IC6   | A-4   |                       |      |
| IC7   | A-9   |                       |      |
| Q2    | B-9*  |                       |      |
| Q3    | B-9*  |                       |      |
| Q4    | B-9*  |                       |      |
| Q5    | A-9*  |                       |      |
| Q6    | A-6*  |                       |      |
| Q7    | B-9*  |                       |      |
| Q15   | B-9*  |                       |      |
| Q100  | B-2*  |                       |      |
| Q101  | B-3   |                       |      |
| Q102  | A-8*  |                       |      |
| Q103  | A-8*  |                       |      |
| Q104  | B-5*  |                       |      |
| Q105  | B-5   |                       |      |

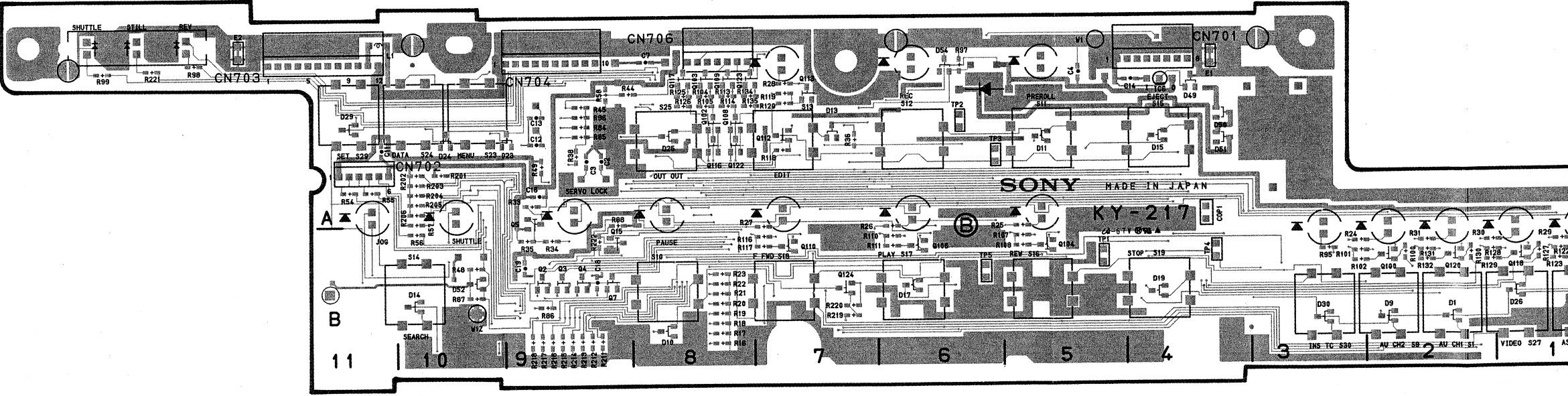
KY-217 BOARD  
A Side



1-642-869-13 A SIDE

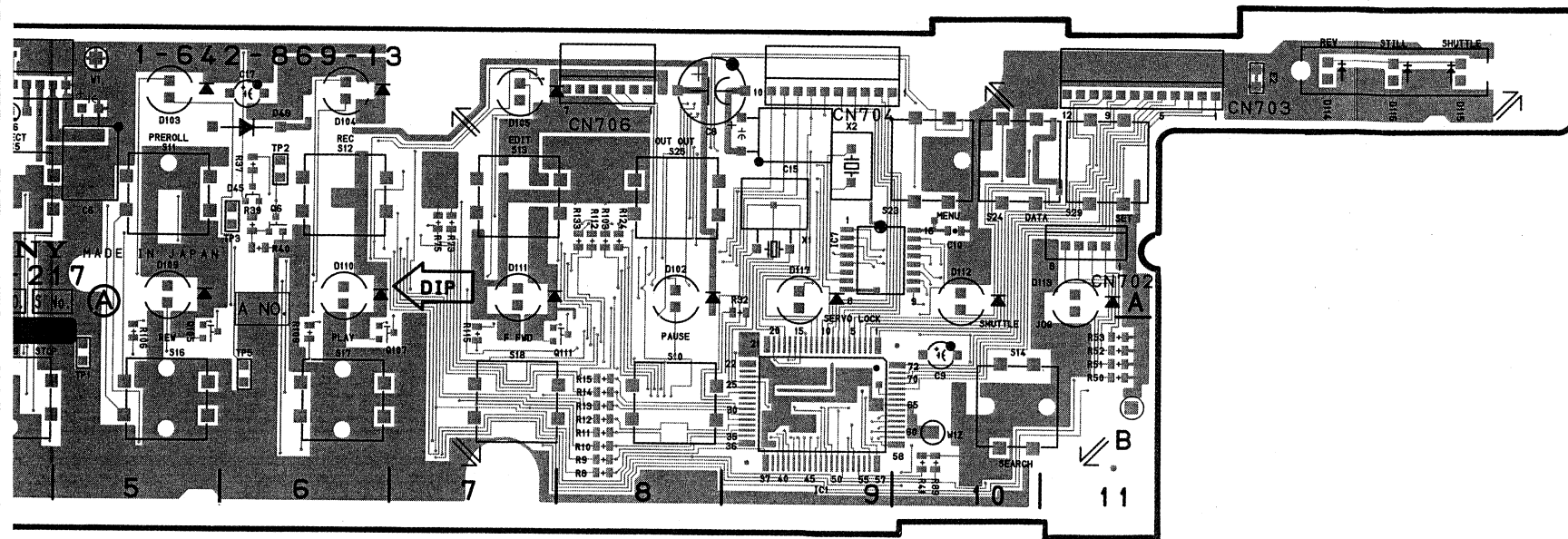
A Side is the same as Component Side

KY-217 BOARD  
B Side



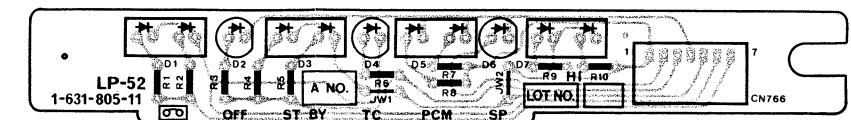
1-642-869-13 B SIDE

B Side is the same as Soldering Side



## LP-52 BOARD

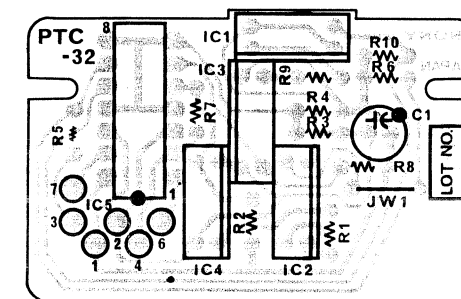
### Component Side



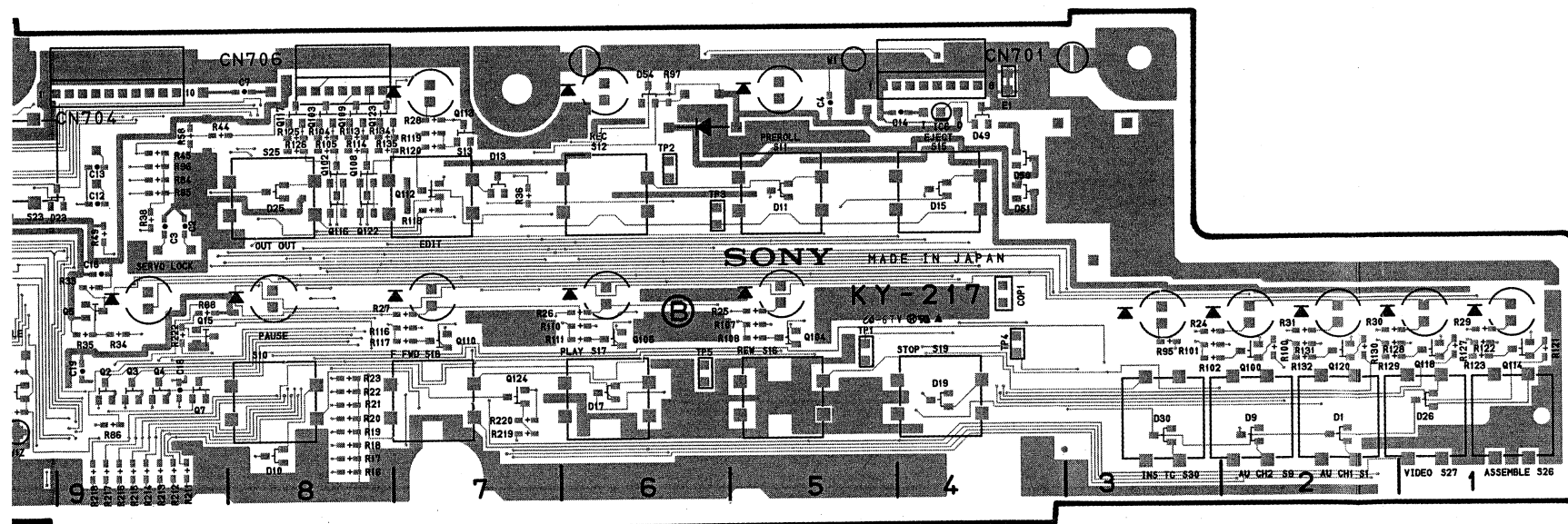
1-631-805-11 COMPONENT SIDE

## PTC-32 BOARD

### Component Side



1-622-638-12 COMPONENT SIDE

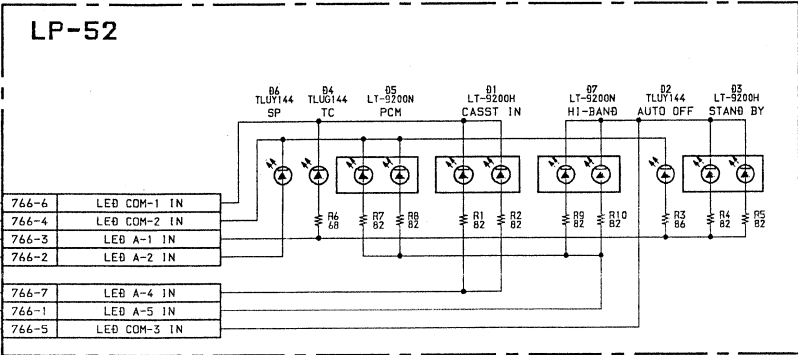
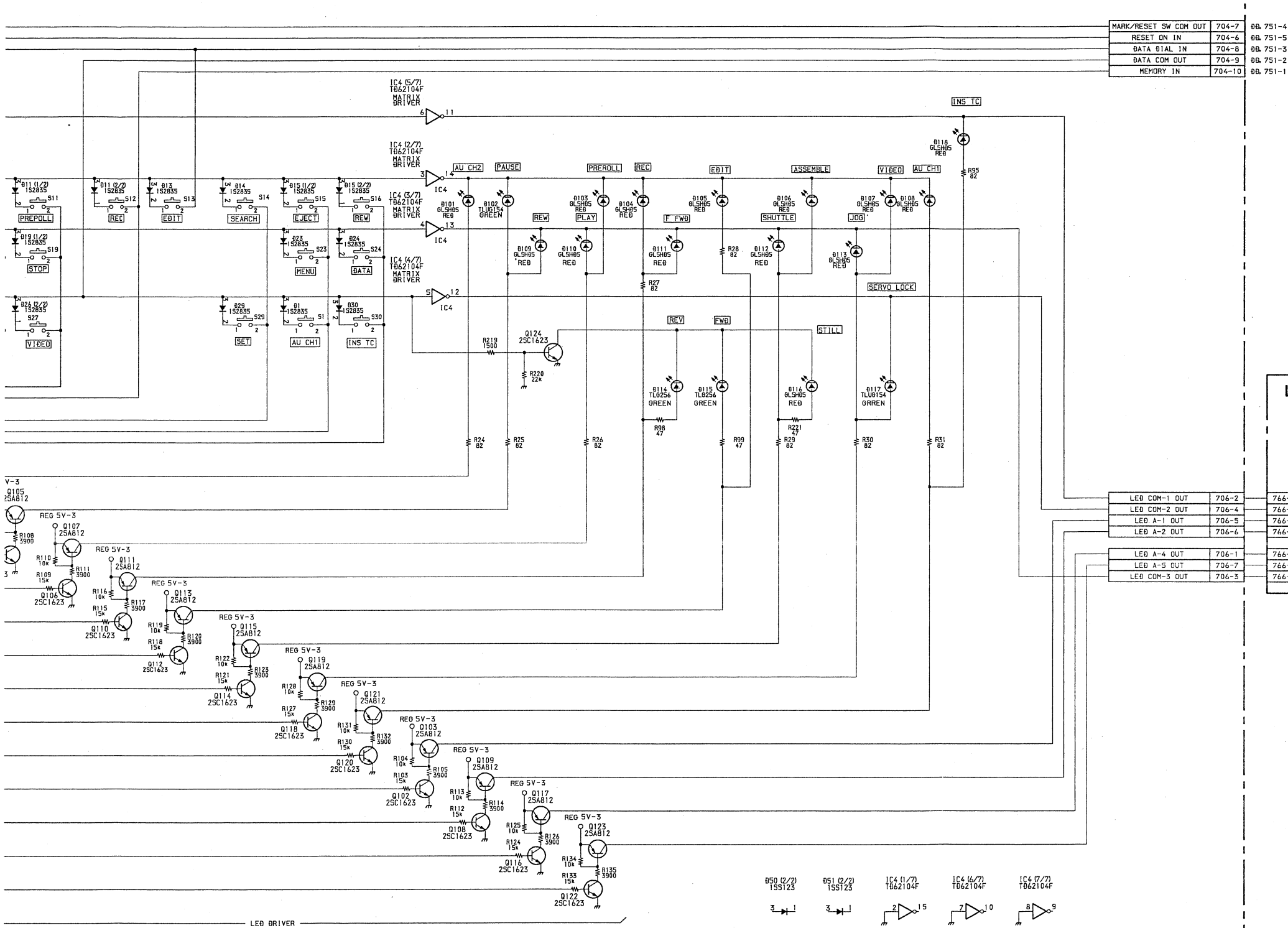


E

s Soldering Side







Mode Display

**LP-52 BOARD**

BOARD NO. 1-631-805-11

EVO-9850P (EK) : #10001 —

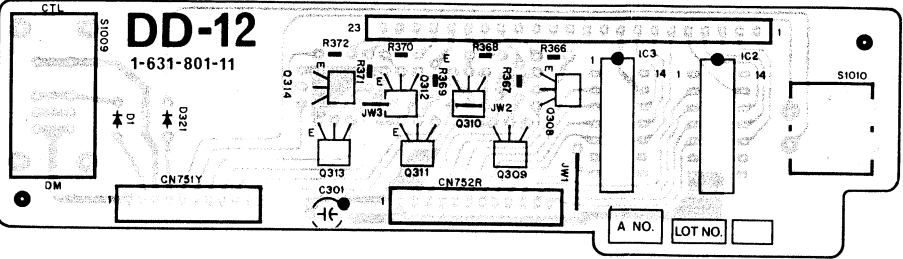
**Function Key Board**

**KY-217 BOARD**

BOARD NO. 1-642-869-13

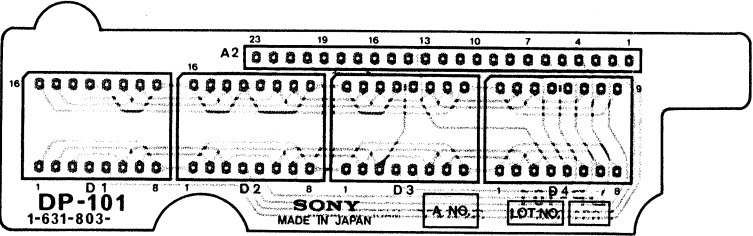
EVO-9850P (EK) : #10001 —

DD-12 BOARD  
Component Side



1-631-801-11 COMPONENT SIDE

DP-101 BOARD  
Component Side



1-631-803-12 COMPONENT SIDE

KY. 703-11  
KY. 703-5  
KY. 703-10  
KY. 704-1  
KY. 704-2  
KY. 704-3  
KY. 704-4  
KY. 704-5

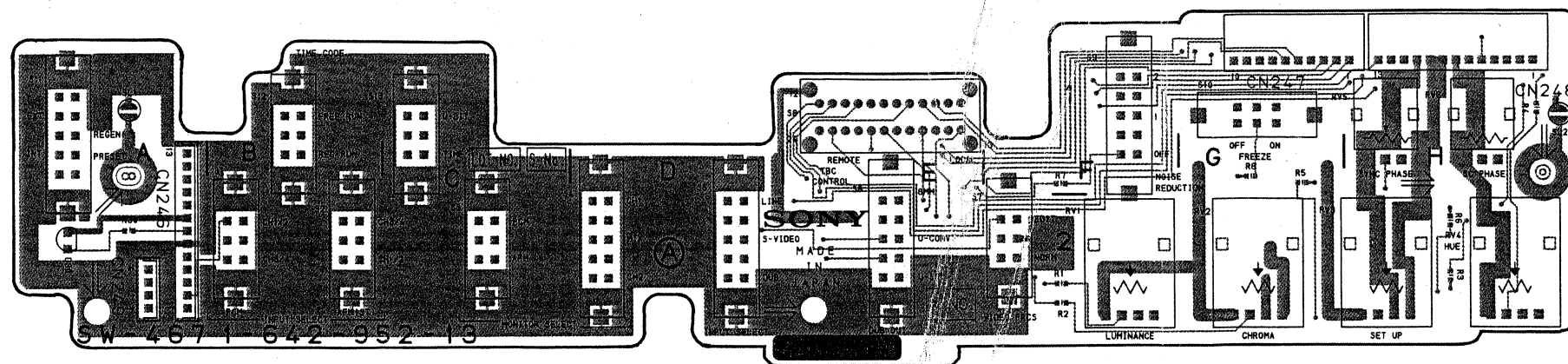
KY. 703-1  
KY. 703-2  
KY. 703-3  
KY. 703-4  
KY. 703-12

KY. 703-5  
KY. 703-6  
KY. 703-7  
KY. 703-8

KY. 704-7  
KY. 704-6



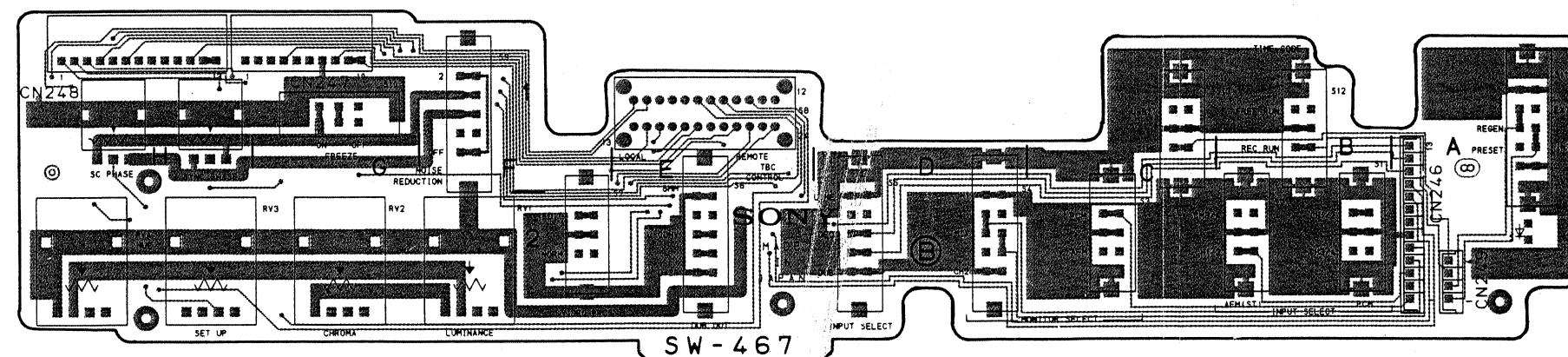
# SW-467P BOARD A Side



1-642-952-13 A SIDE

A Side is the same as Component Side

# SW-467P BOARD B Side



1-642-952-13 B SIDE

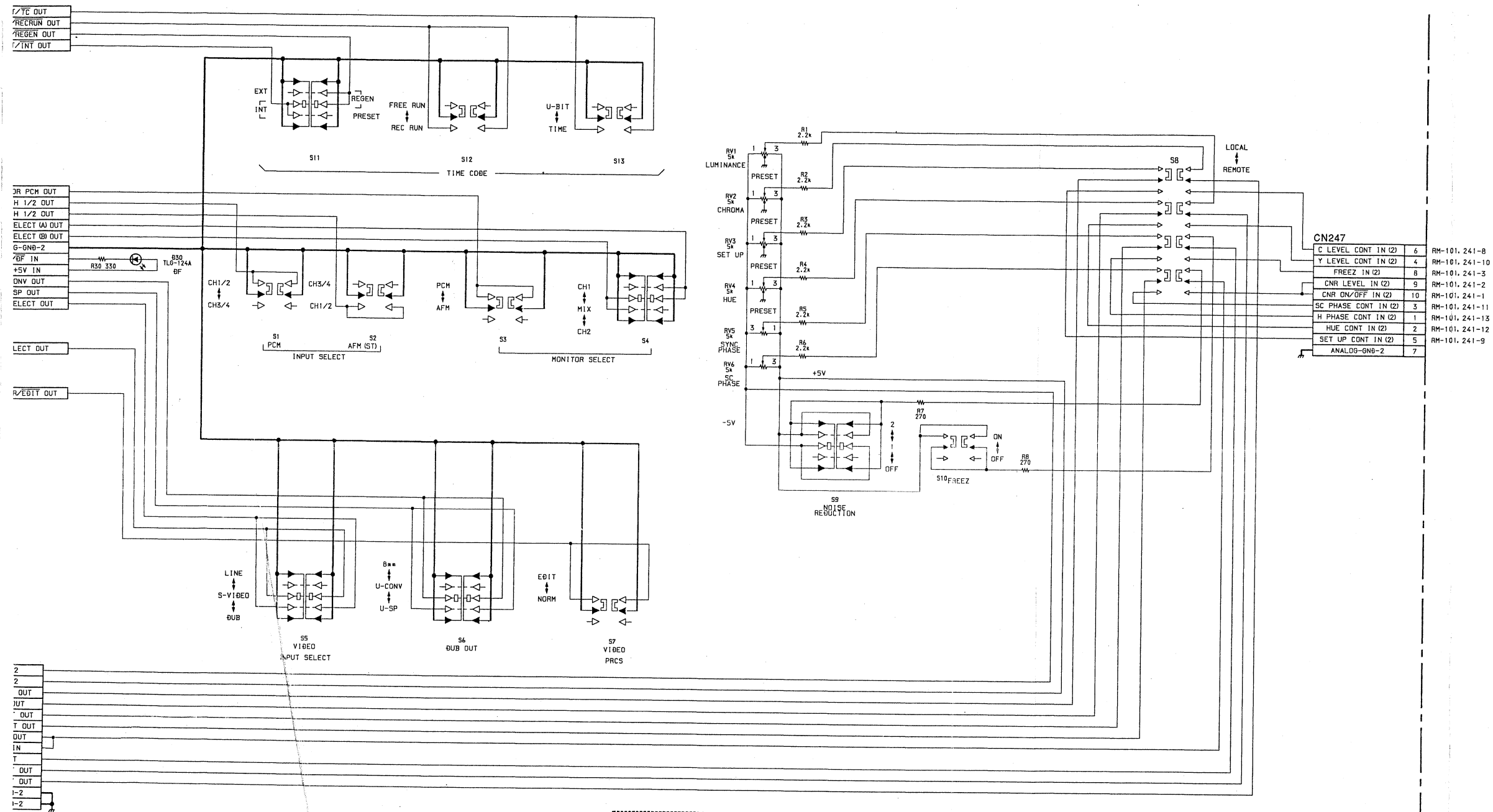
B Side is the same as Soldering Side

|            |       |                    |
|------------|-------|--------------------|
| SST. 307-4 | 249-4 | U-BIT/TC OUT       |
| SST. 307-3 | 249-3 | TC FREE/RECRUN OUT |
| SST. 307-2 | 249-2 | PRESET/REGEN OUT   |
| SST. 307-1 | 249-1 | TC EXT/INT OUT     |

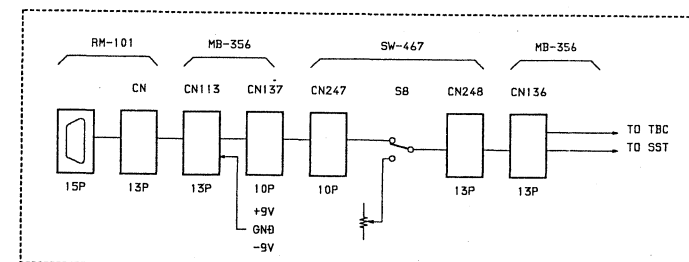
|                |        |                        |
|----------------|--------|------------------------|
| AU-156 604-27B | 246-1  | L:MONITOR PCM OUT      |
| AU-156 604-26B | 246-2  | L:PCM CH 1/2 OUT       |
| AU-156 604-25B | 246-3  | L:AFM CH 1/2 OUT       |
| AU-156 603-11A | 246-4  | MONITOR SELECT (A) OUT |
| AU-156 603-12A | 246-5  | MONITOR SELECT (B) OUT |
| SST. 311-3     | 246-6  | ANALOG-GNB-2           |
| VA. 610-6A     | 246-7  | NBF/BF IN              |
| VA. 610-5A     | 246-8  | REG +5V IN             |
| SST. 312-12    | 246-9  | L:U-CONV OUT           |
| MD. 605-21A    | 246-10 | L:U-SP OUT             |
| DM. 607-21A    | 246-11 | L:SUB SELECT OUT       |
| MD. 605-22A    | 246-12 | L:S SELECT OUT         |
| DM. 607-22A    | 246-13 | VIDEO NOR/EDIT OUT     |
| MD. 606-22A    |        |                        |
| DM. 608-22A    |        |                        |
| VA. 609-12A    |        |                        |
| SST. 315-17    |        |                        |

|              |       |                   |
|--------------|-------|-------------------|
|              | CN248 |                   |
|              | 7     | REG -5V-2         |
|              | 10    | REG +5V-2         |
| TBC. 611-25A | 5     | SET UP CONT OUT   |
| TBC. 611-28B | 2     | HUE CONT OUT      |
| TBC. 611-30B | 1     | H PHASE CONT OUT  |
| TBC. 611-29B | 3     | SC PHASE CONT OUT |
| SST. 312-14  | 12    | CNR LEVEL OUT     |
| SST. 312-15  | 13    | CNR ON/OFF IN     |
| SST. 312-13  | 11    | FREEZ OUT         |
| TBC. 611-25B | 4     | Y LEVEL CONT OUT  |
| TBC. 611-26B | 6     | C LEVEL CONT OUT  |
|              | 8     | ANALOG-GNB-2      |
|              | 9     | ANALOG-GNB-2      |

\*1 EVO-9850:AU-156  
EVO-9850P:AU-156AP

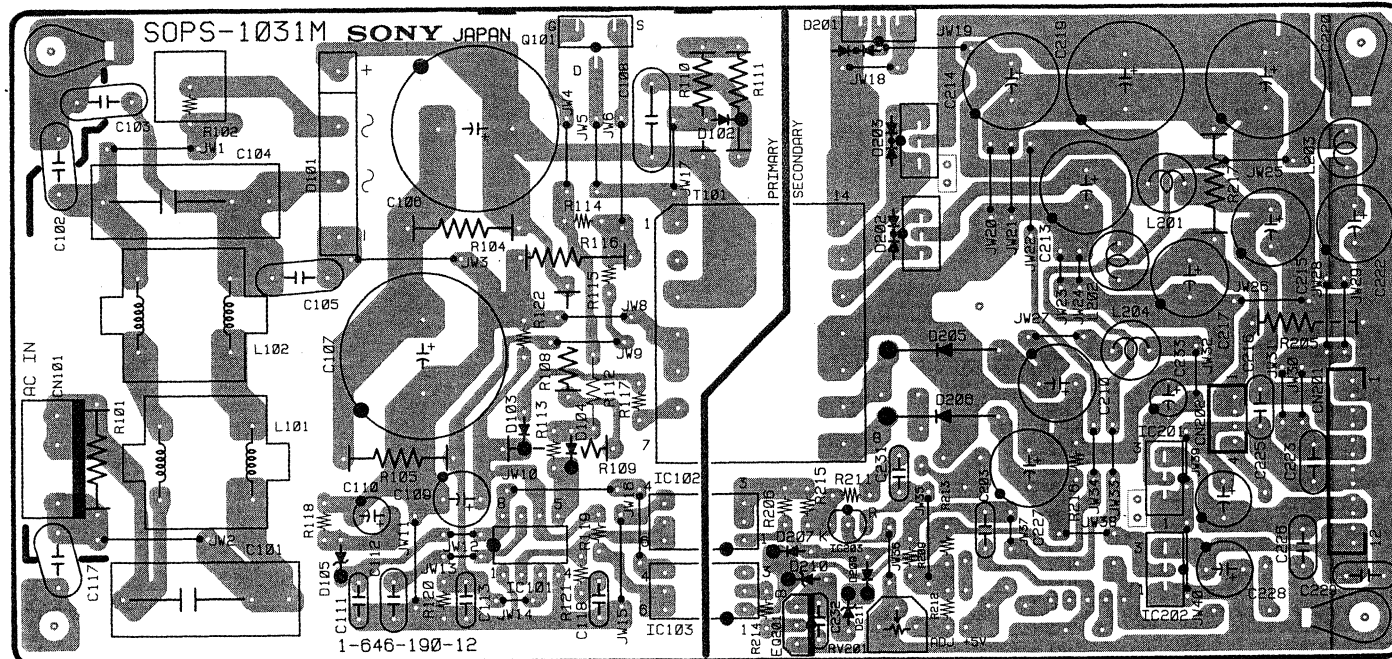


EVO-9850:AU-156  
EVO-9850P:AU-156AP



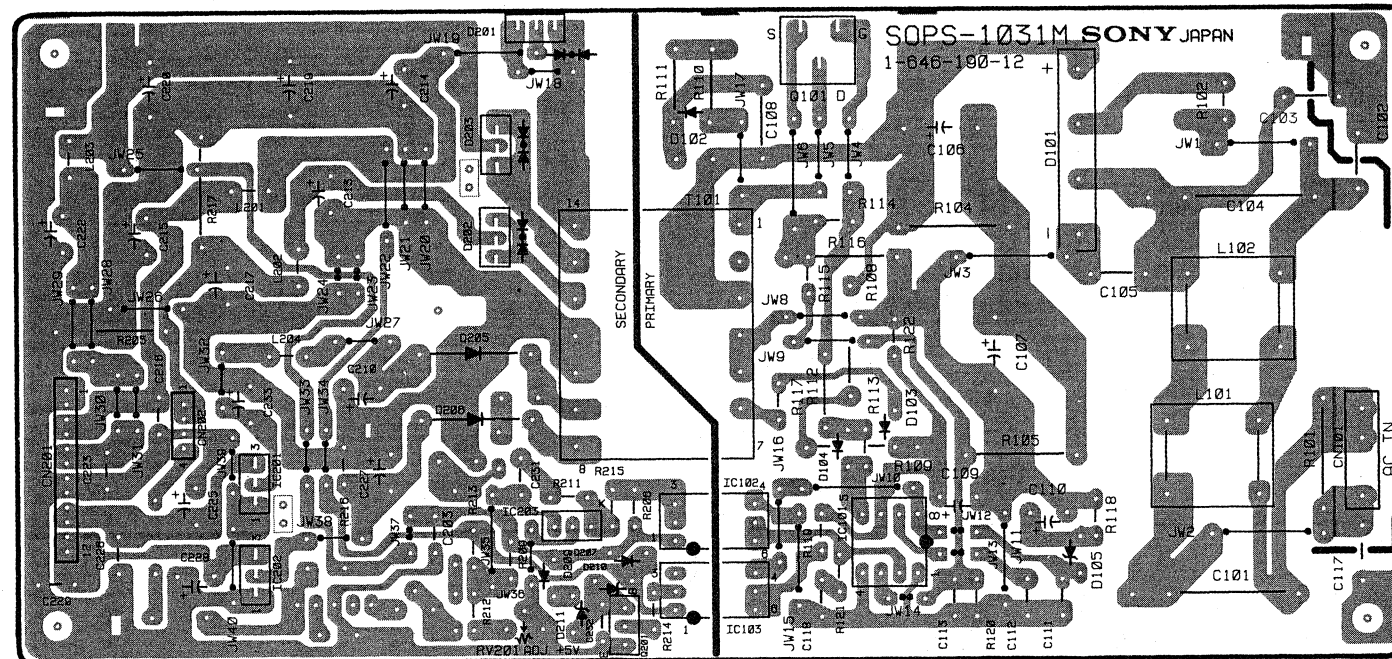
**Sub Panel Switch**  
**SW-467P BOARD**  
BOARD NO. 1-642-952-13  
EVO-9850P (EK) : #10001 —

# SOPS-1031 BOARD Component Side

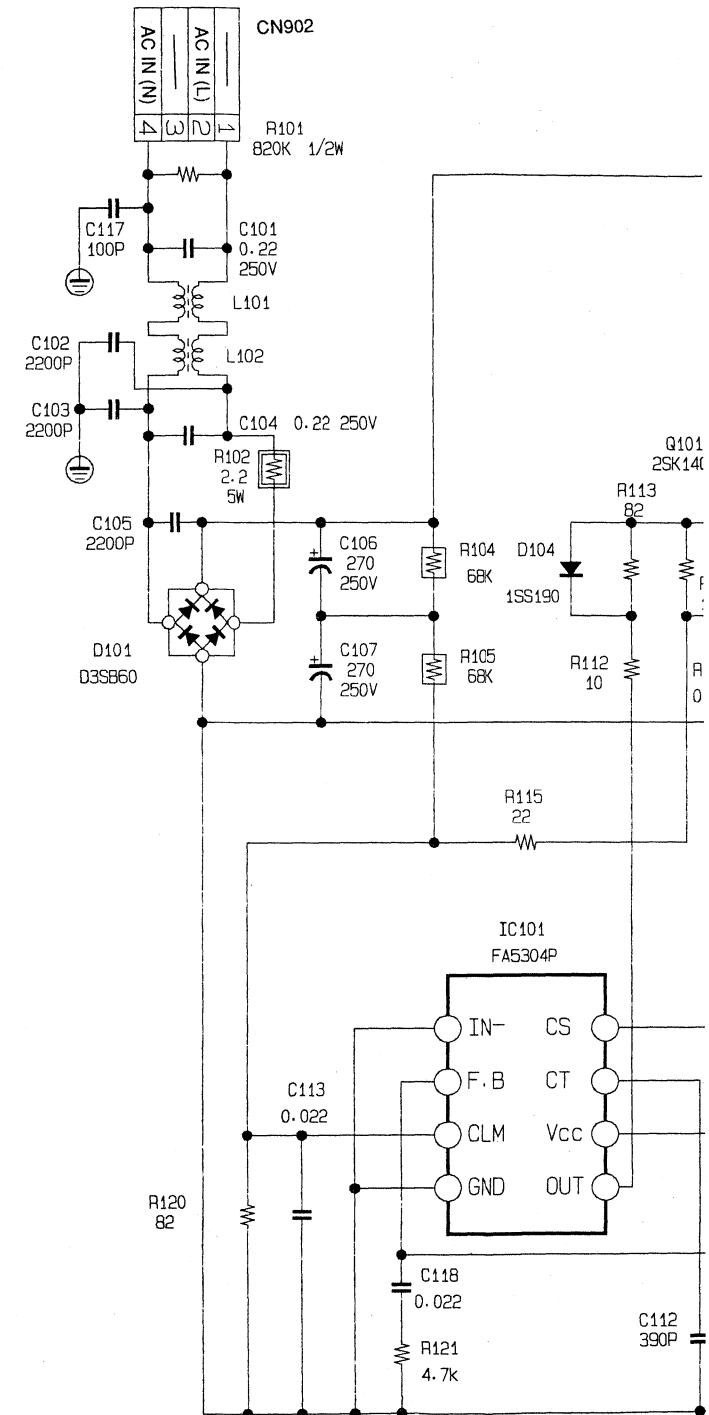


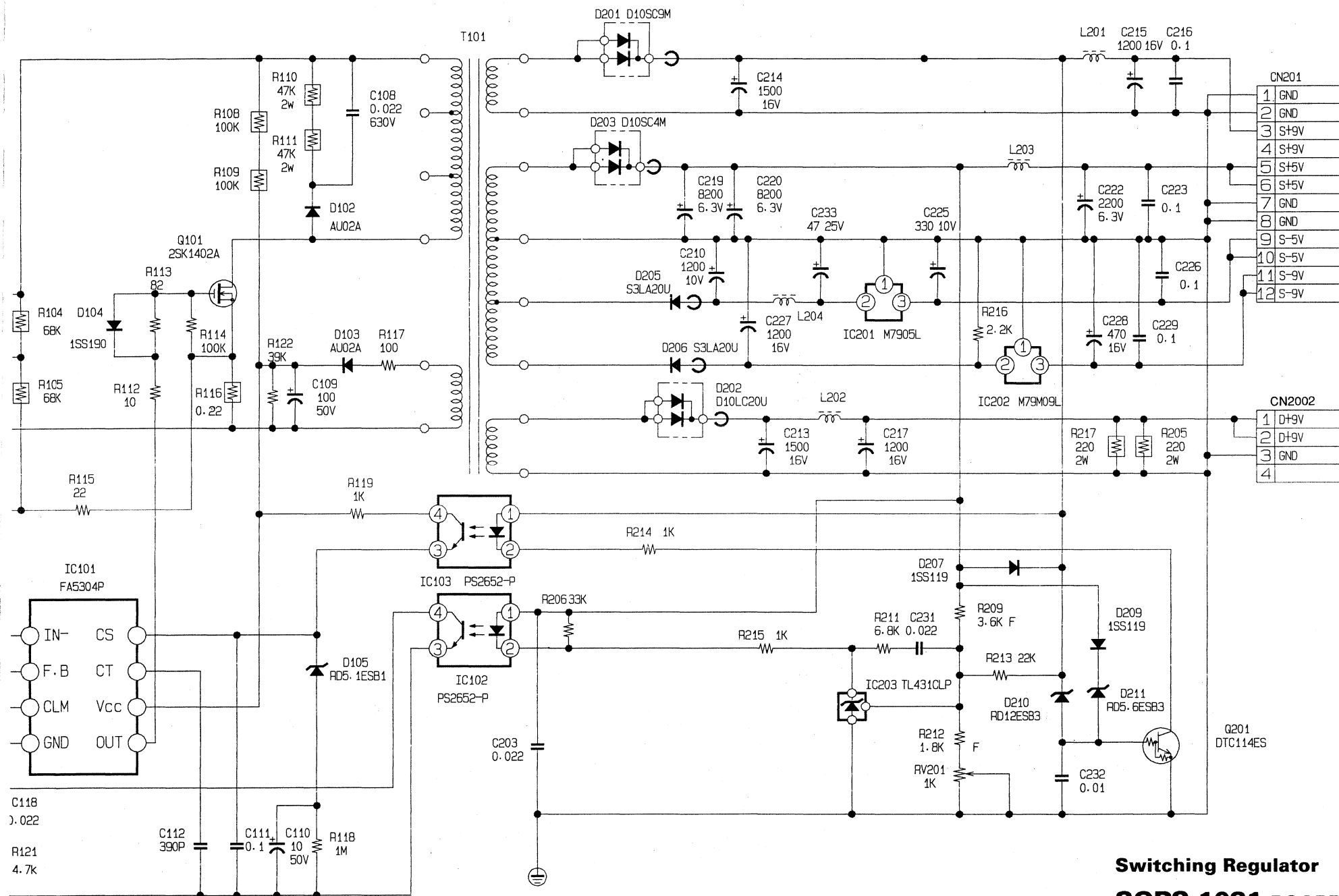
1-413-820-11 COMPONENT SIDE

# SOPS-1031 BOARD Solder Side



1-413-820-11 SOLDER SIDE



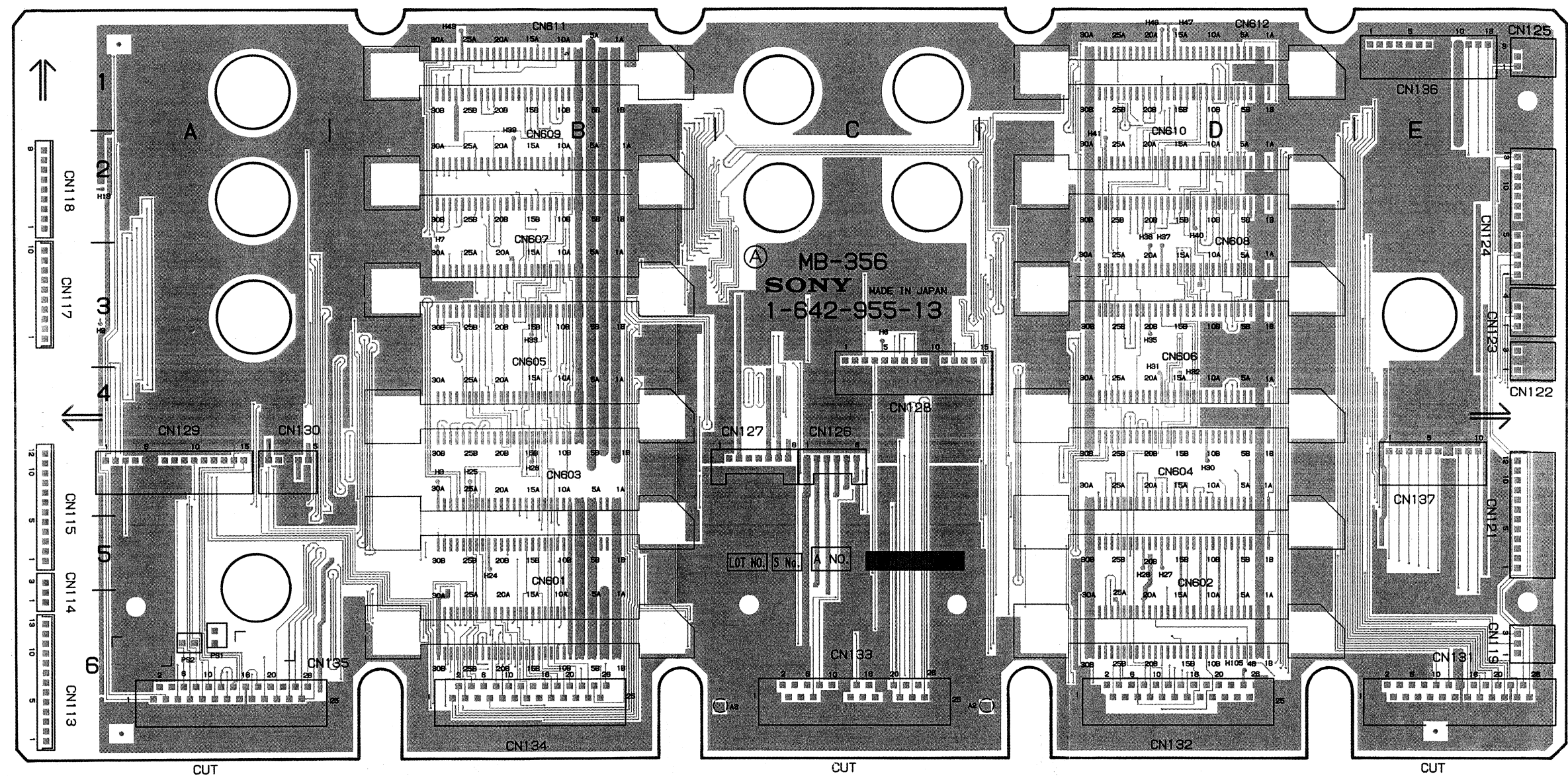




MB-356P (1-642-955-13)

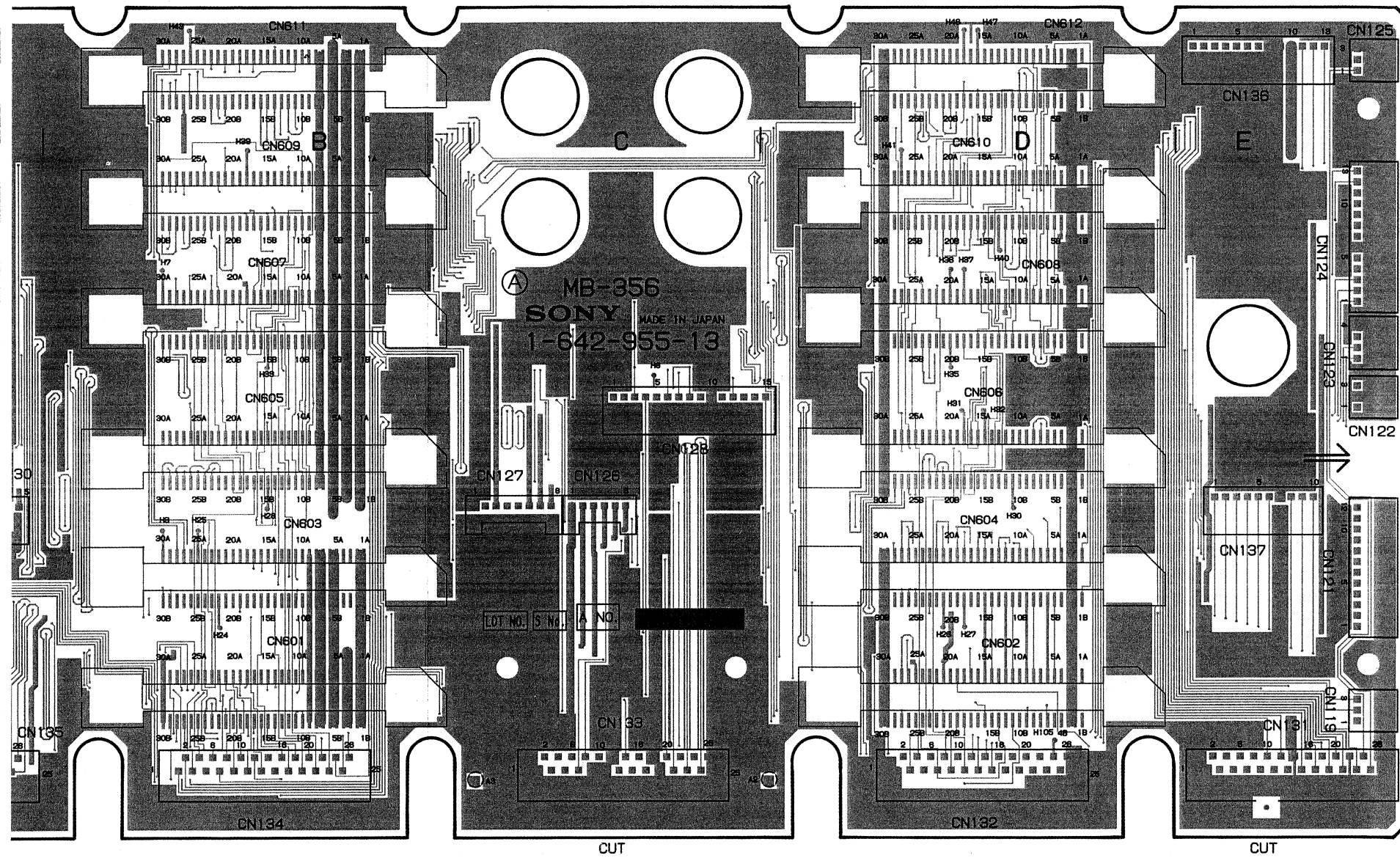
|       |     |
|-------|-----|
| CN113 | A-6 |
| CN114 | A-6 |
| CN115 | A-5 |
| CN117 | A-3 |
| CN118 | A-2 |
| CN119 | E-6 |
| CN121 | E-5 |
| CN122 | E-3 |
| CN123 | E-3 |
| CN124 | E-3 |
| CN125 | E-1 |
| CN126 | C-4 |
| CN127 | C-4 |
| CN128 | C-3 |
| CN129 | A-4 |
| CN130 | A-4 |
| CN131 | E-6 |
| CN132 | D-6 |
| CN133 | C-6 |
| CN134 | B-6 |
| CN135 | A-6 |
| CN136 | E-1 |
| CN137 | E-4 |
| CN601 | B-6 |
| CN602 | D-6 |
| CN603 | B-5 |
| CN604 | D-5 |
| CN605 | B-4 |
| CN606 | D-4 |
| CN607 | B-3 |
| CN608 | D-3 |
| CN609 | B-2 |
| CN610 | D-2 |
| CN611 | B-1 |
| CN612 | D-1 |
| PS1   | A-6 |
| PS2   | A-6 |

# **MB-356P BOARD** **A Side**



1-642-955-13 A SIDE

A Side is the same as Component Side



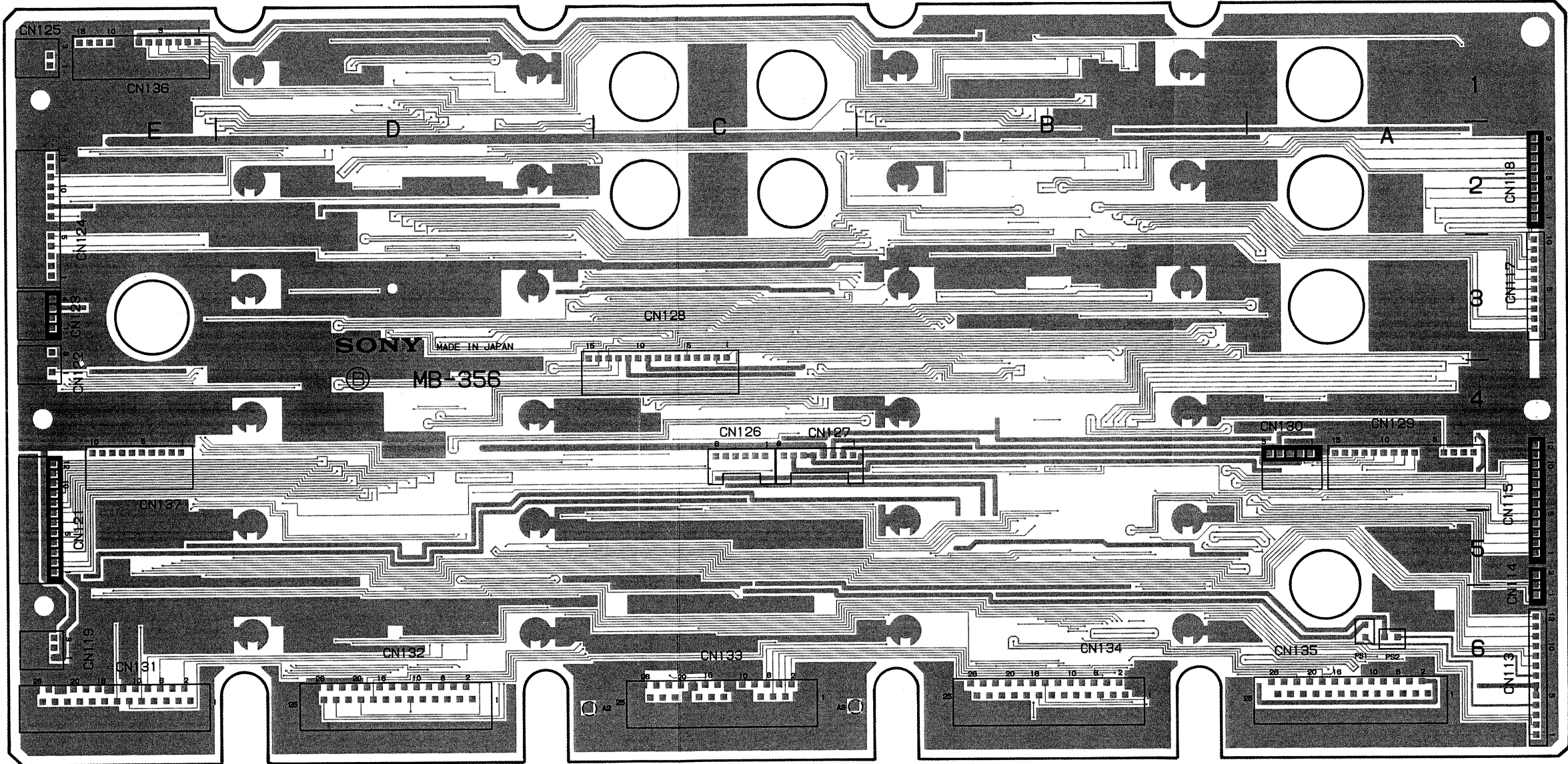


MB-356P (1-642-955-13)

- CN113 A-6
- CN114 A-6
- CN115 A-5
- CN117 A-3
- CN118 A-2
- CN119 E-6
- CN121 E-5
- CN122 E-3
- CN123 E-3
- CN124 E-3
- CN125 E-1
- CN126 C-4
- CN127 C-4
- CN128 C-3
- CN129 A-4
- CN130 A-4
- CN131 E-6
- CN132 D-6
- CN133 C-6
- CN134 B-6
- CN135 A-6
- CN136 E-1
- CN137 E-4
- CN601 B-6
- CN602 D-6
- CN603 B-5
- CN604 D-5
- CN605 B-4
- CN606 D-4
- CN607 B-3
- CN608 D-3
- CN609 B-2
- CN610 D-2
- CN611 B-1
- CN612 D-1

- PS1 A-6
- PS2 A-6

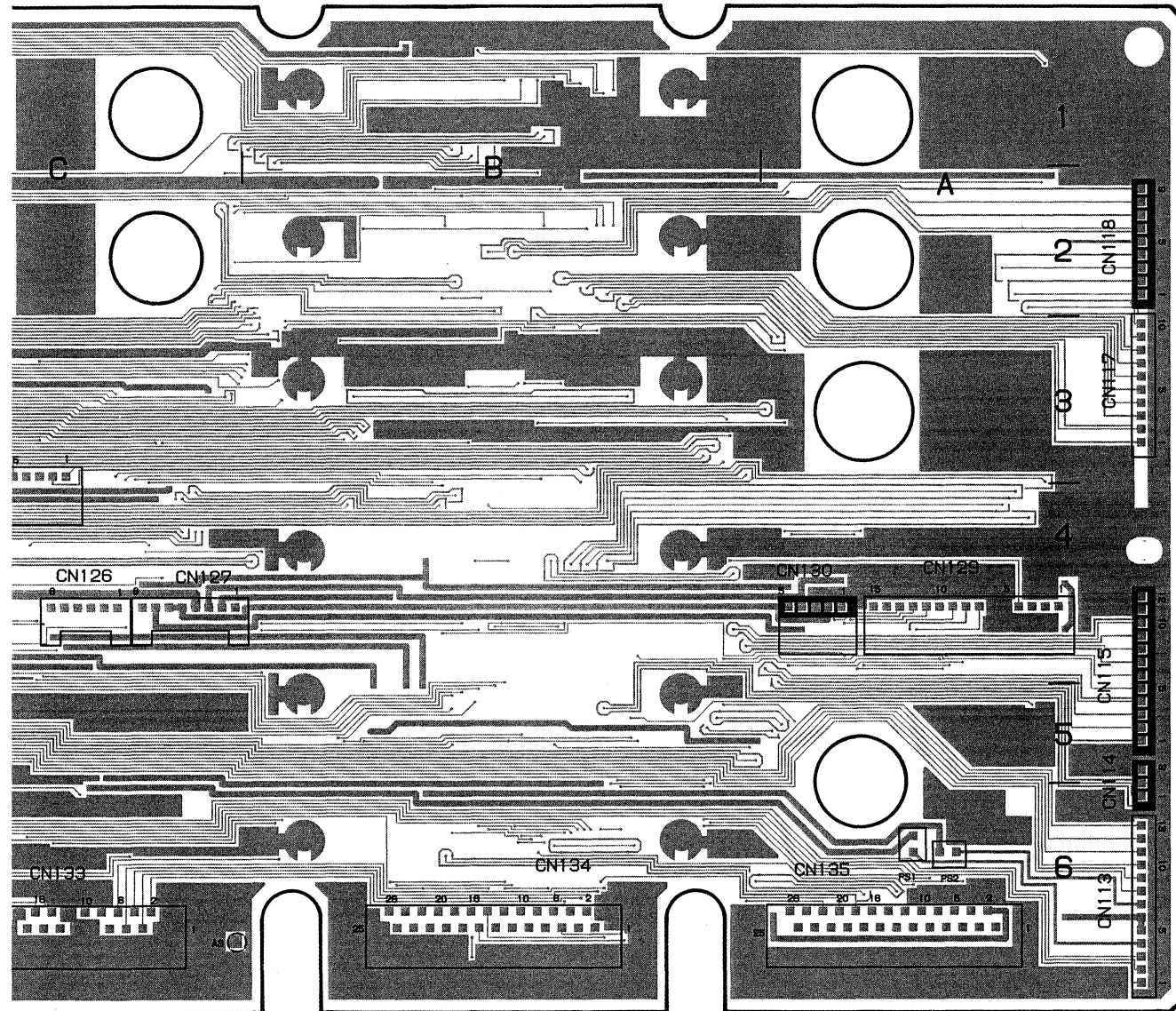
**MB-356P BOARD**  
**B Side**

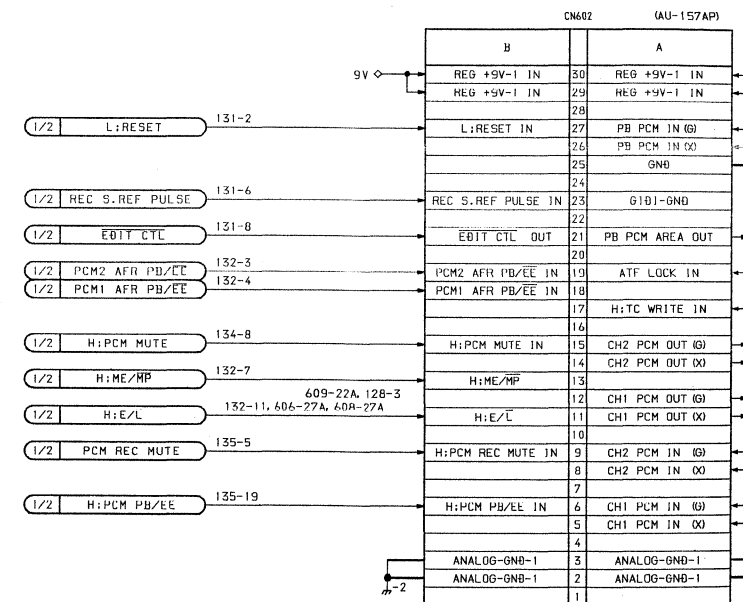
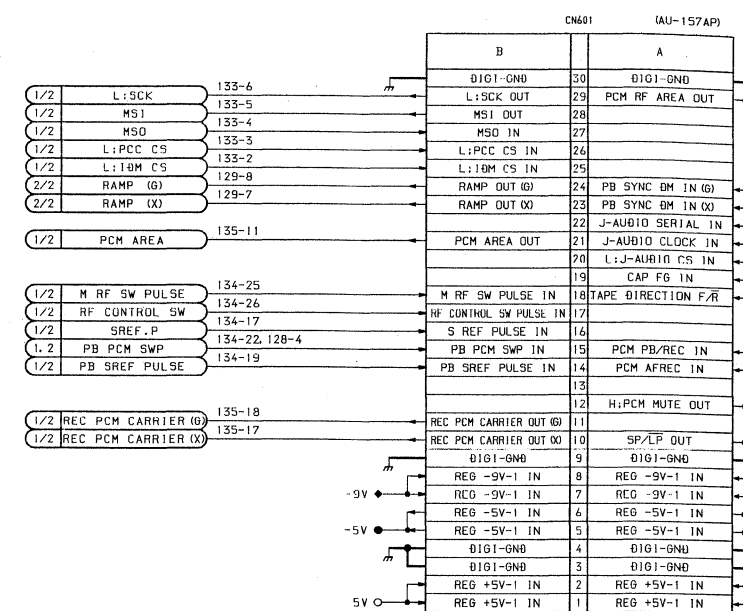
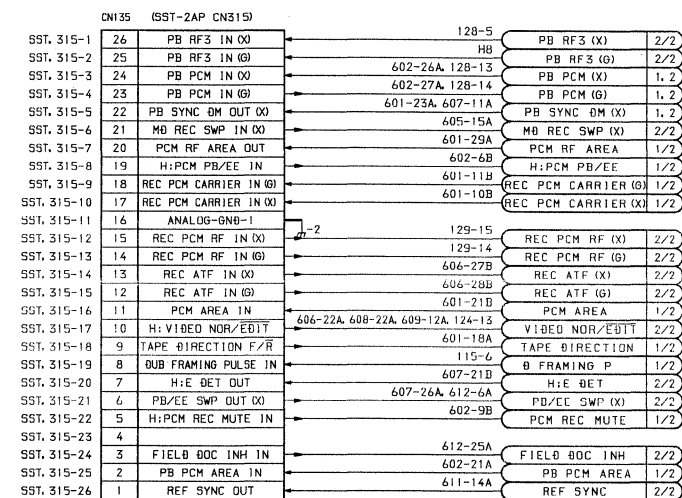
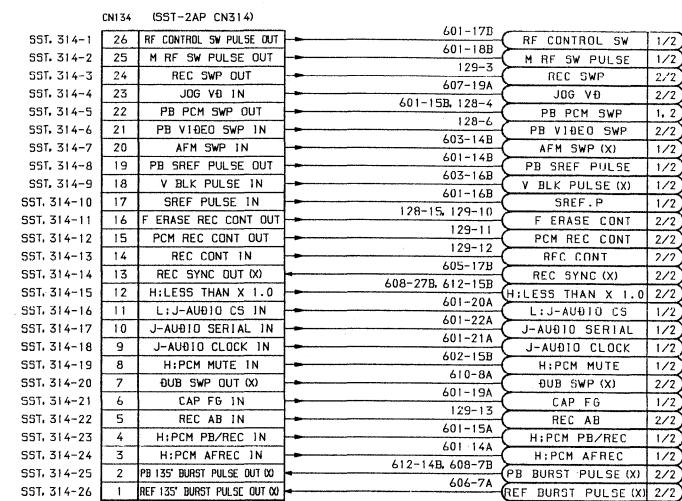
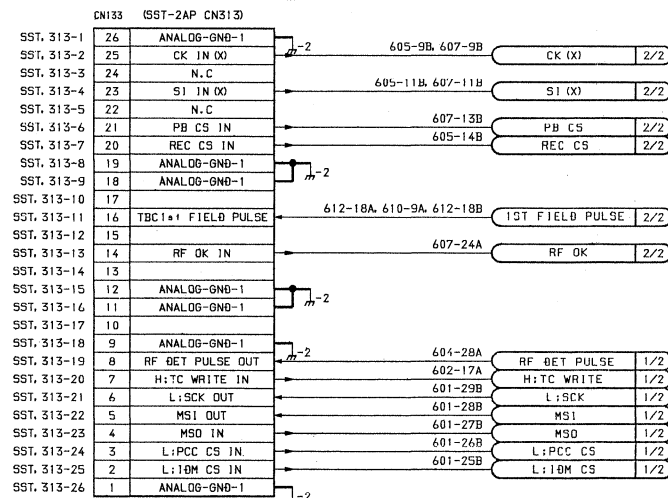
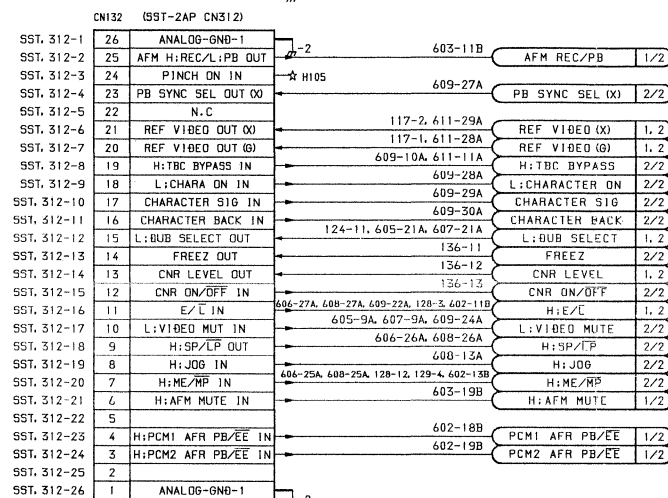
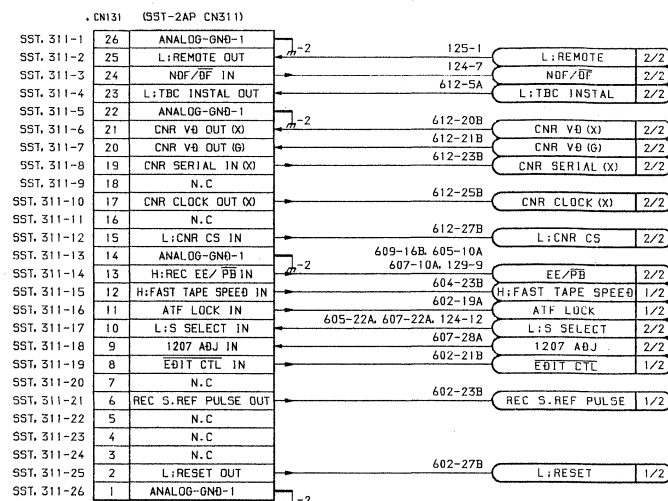


1-642-955-13 B SIDE

B Side is the same as Soldering Side







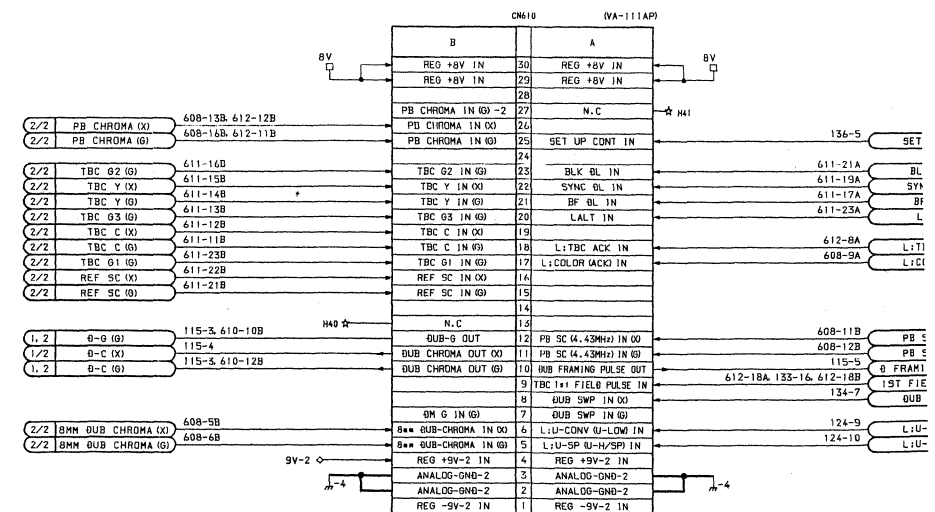
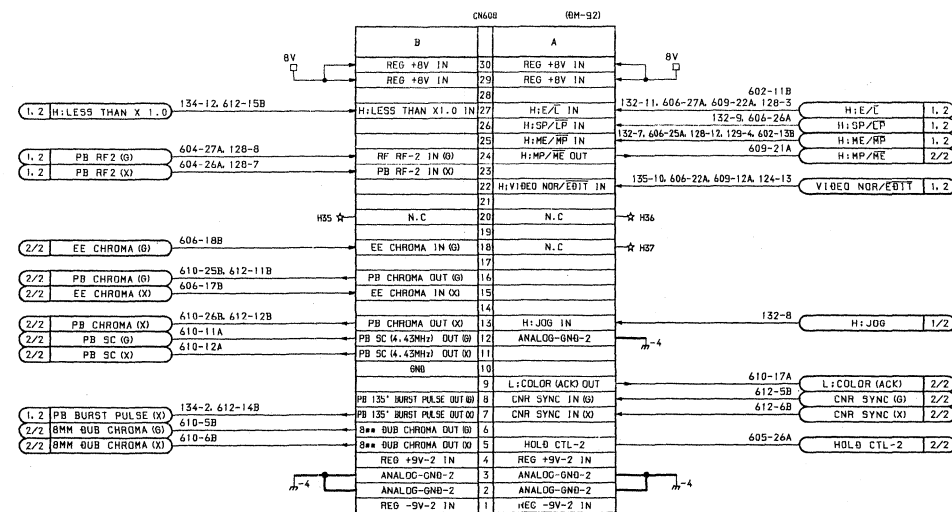
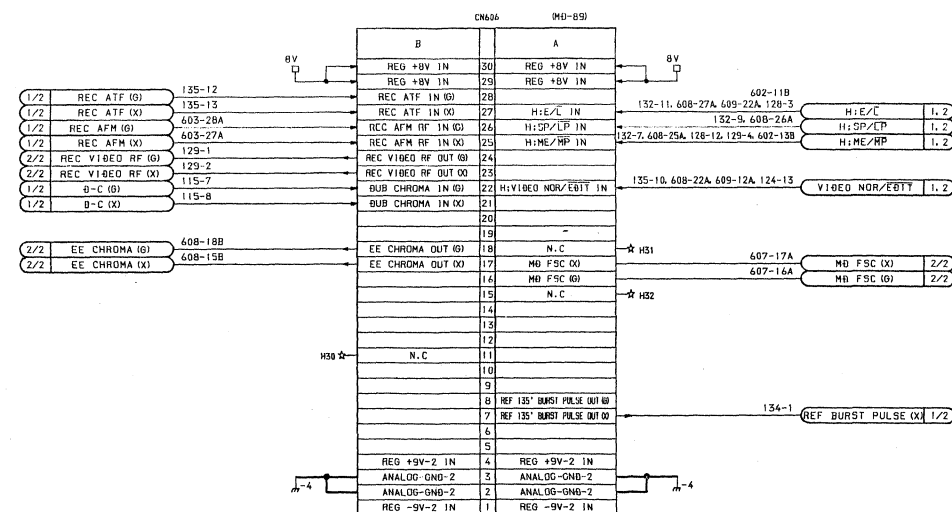
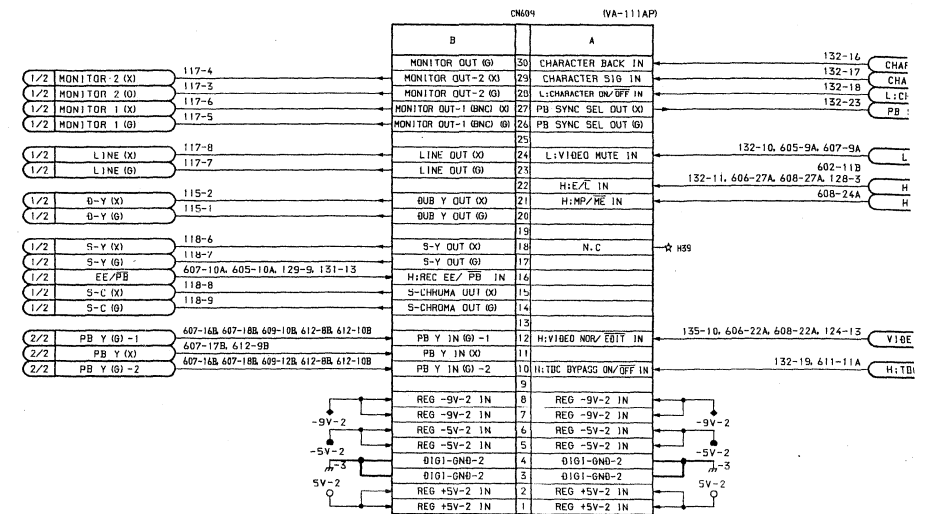
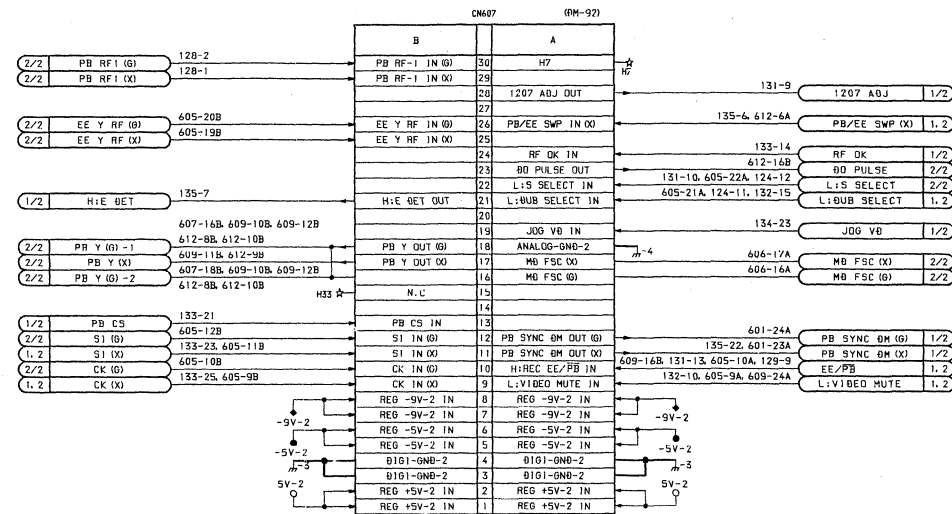
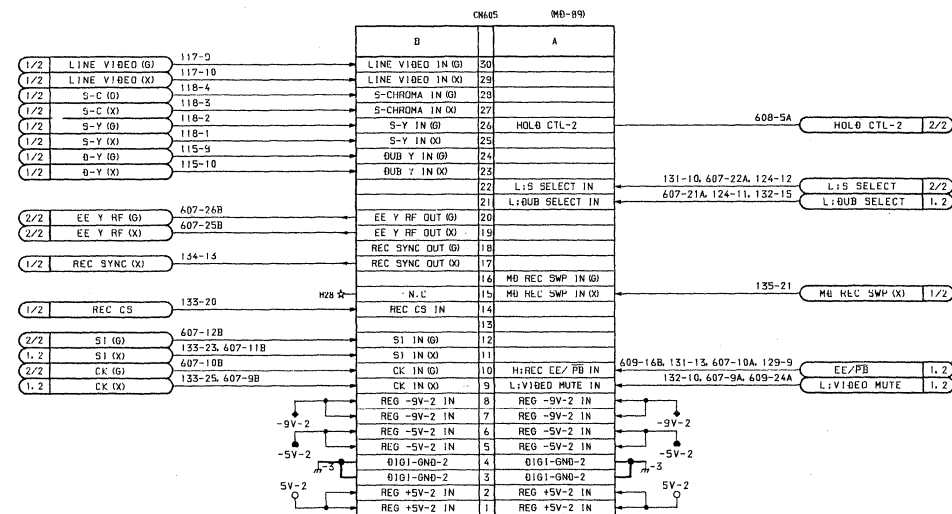


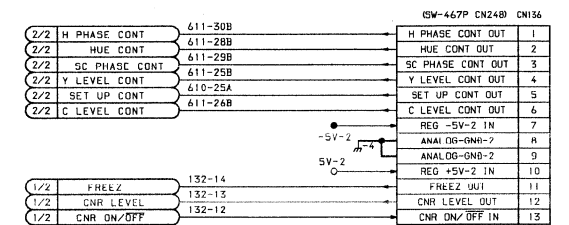
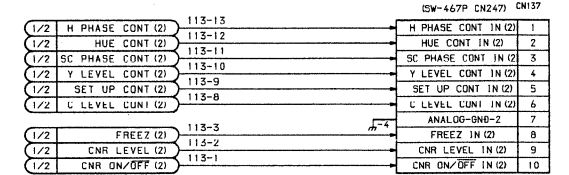
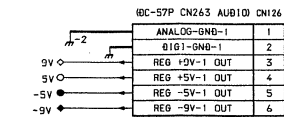
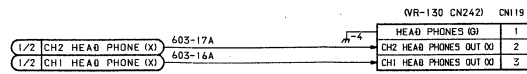
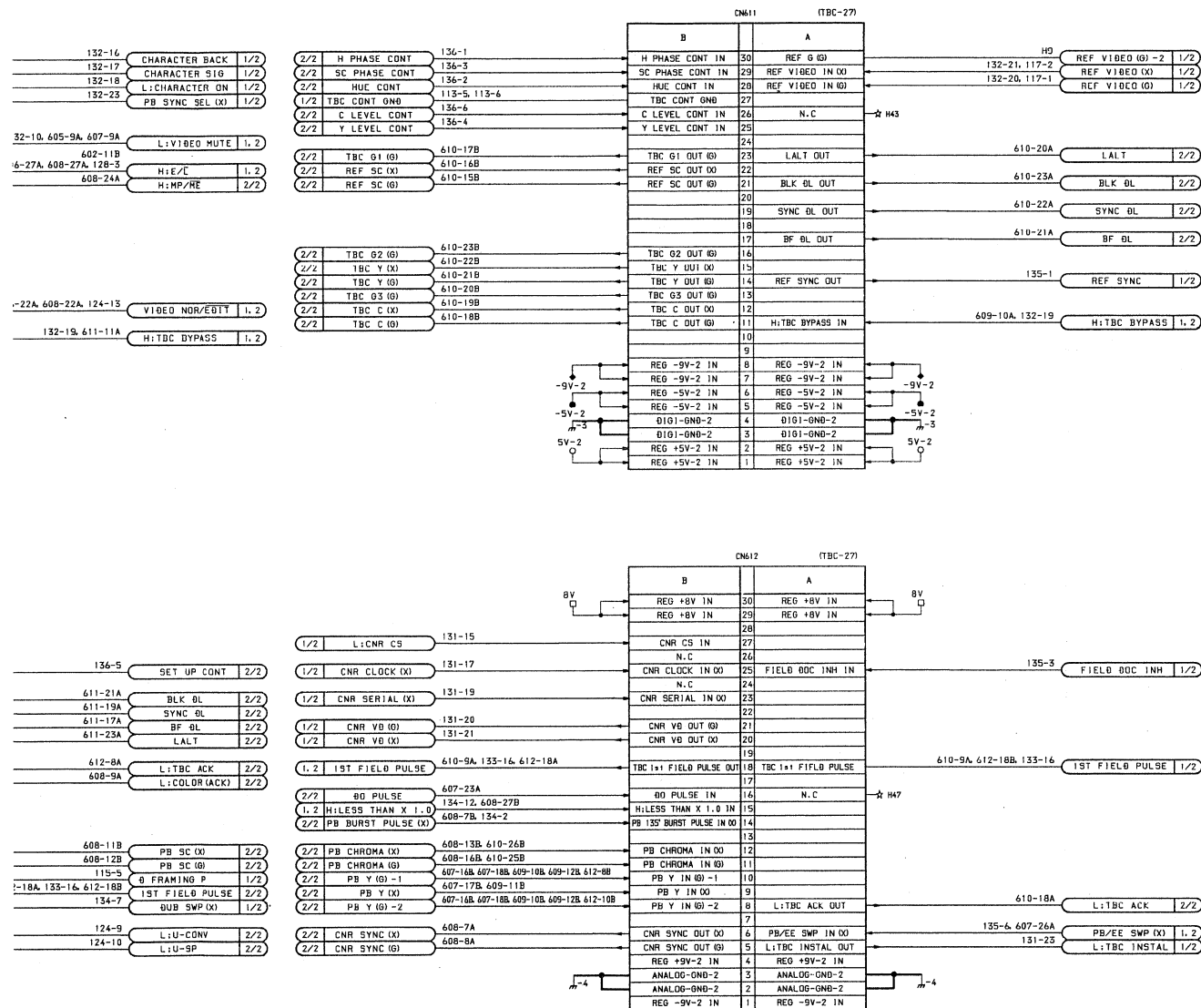
Mother Board

**MB-356P BOARD (1/2)**

BOARD NO. 1-642-955-13

EVO-9850P (EK) : #10001—





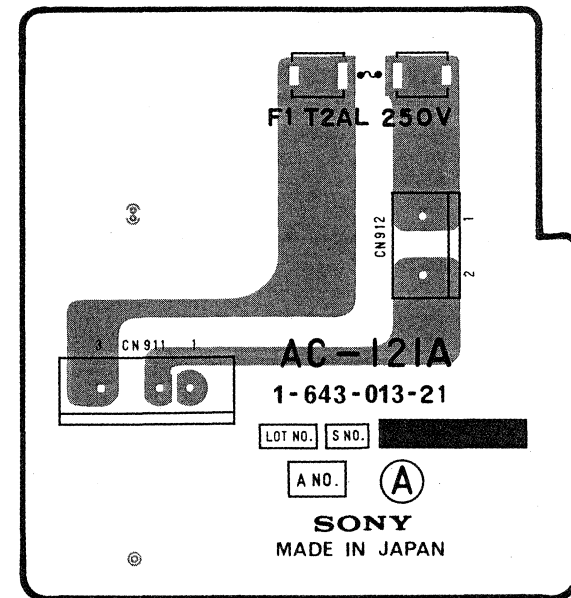
Mother Board

MB-356P BOARD (2/2)

BOARD NO. 1-642-955-13

EVO-9850P (EK) : #10001 -

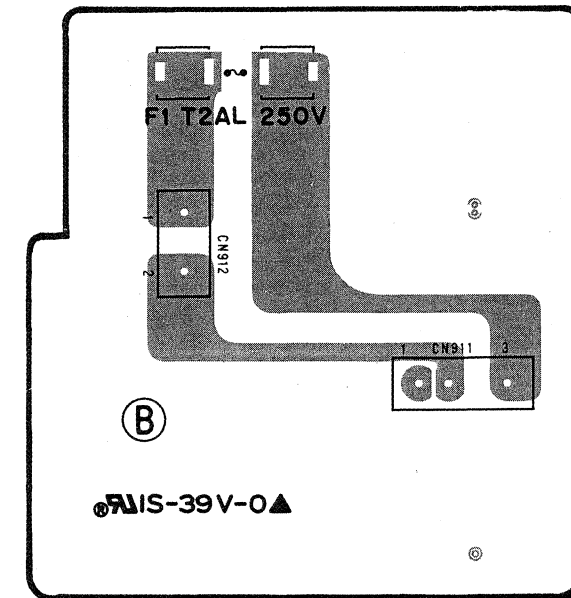
# AC-121AP BOARD A Side



1-643-013-21 A SIDE

A Side is the same as Component Side

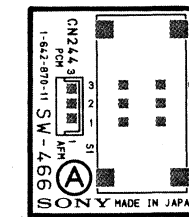
# AC-121AP BOARD B Side



1-643-013-21 B SIDE

B Side is the same as Soldering Side

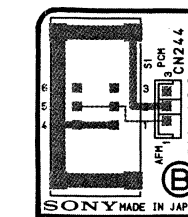
# SW-466 BOARD A Side



1-642-870-11 A SIDE

A Side is the same as Component Side

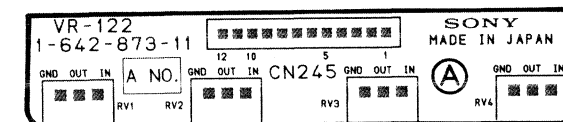
# SW-466 BOARD B Side



1-642-870-11 B SIDE

B Side is the same as Soldering Side

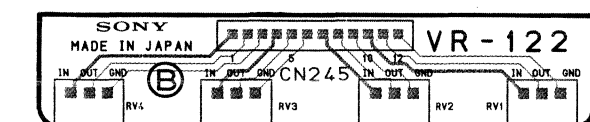
# VR-122 BOARD A Side



1-642-873-11 A SIDE

A Side is the same as Component Side

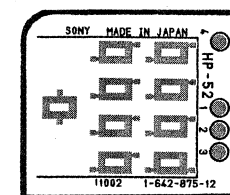
# VR-122 BOARD B Side



1-642-873-11 B SIDE

B Side is the same as Soldering Side

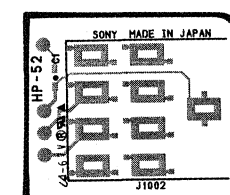
# HP-52 BOARD A Side



1-642-875-21 A SIDE

A Side is the same as Component Side

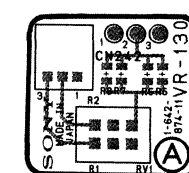
# HP-52 BOARD B Side



1-642-875-21 B SIDE

B Side is the same as Soldering Side

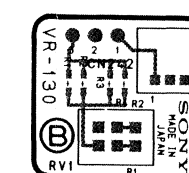
# VR-130 BOARD A Side



1-642-874-11 A SIDE

A Side is the same as Component Side

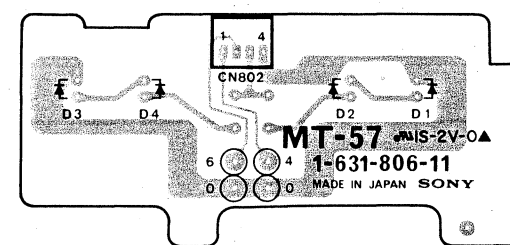
# VR-130 BOARD B Side



1-642-874-11 B SIDE

B Side is the same as Soldering Side

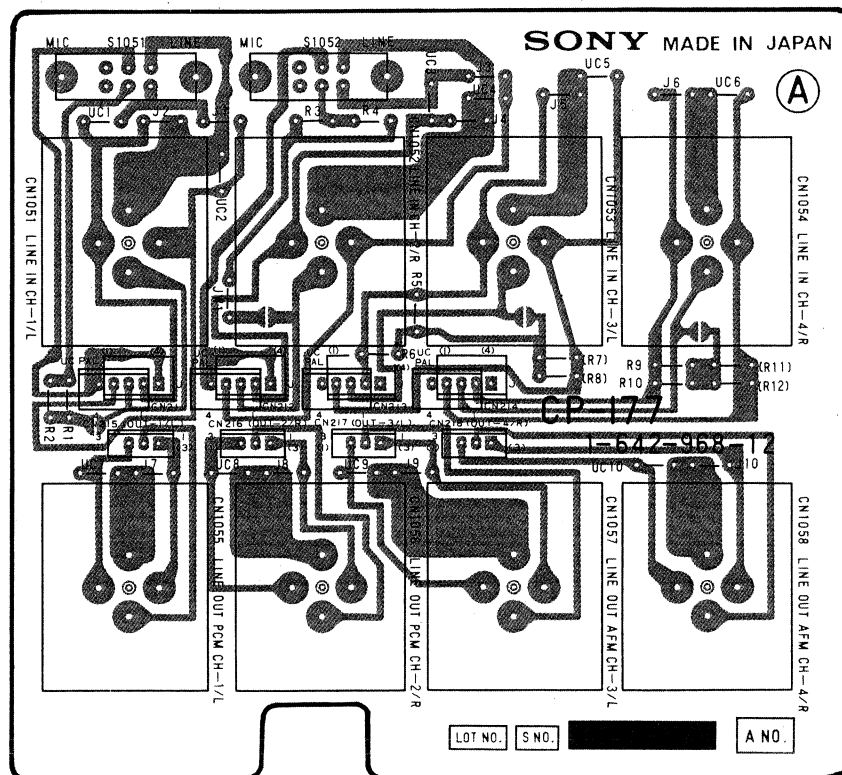
# MT-57A BOARD Solder Side



1-642-952-13 SOLDER SIDE



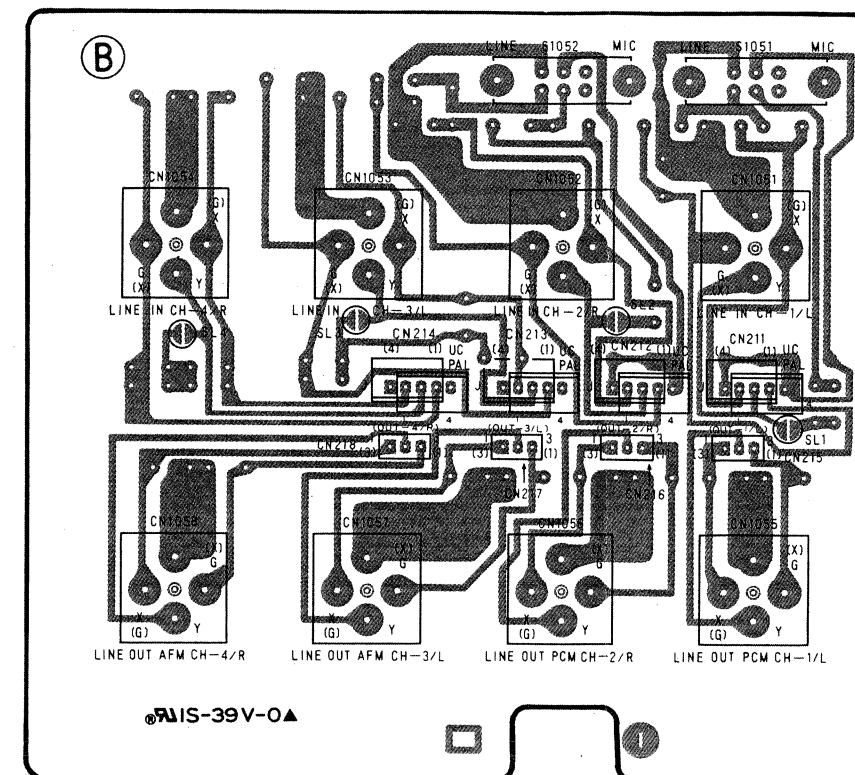
**CP-177 BOARD**  
A Side



1-642-968-12 A SIDE

A Side is the same as Component Side

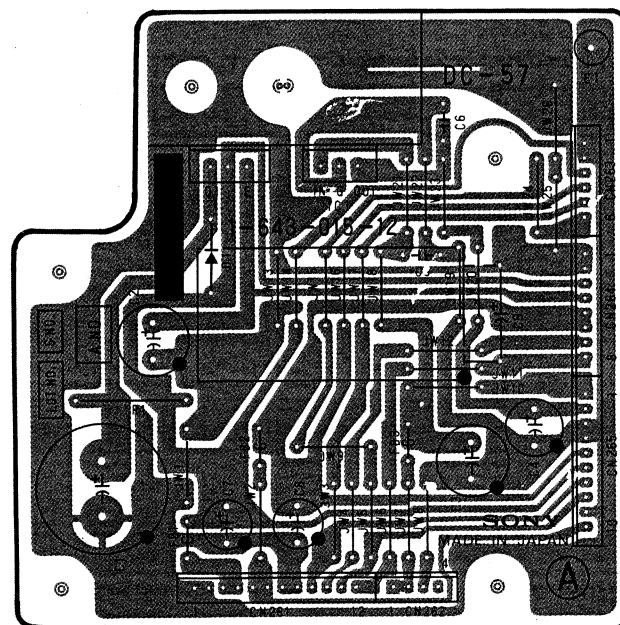
**CP-177 BOARD**  
B Side



1-642-968-12 B SIDE

B Side is the same as Soldering Side

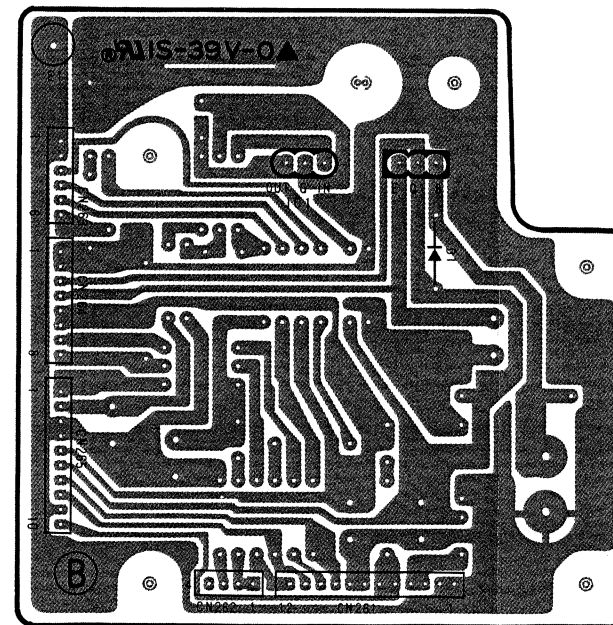
**DC-57P BOARD**  
A Side



1-643-015-12 A SIDE

A Side is the same as Component Side

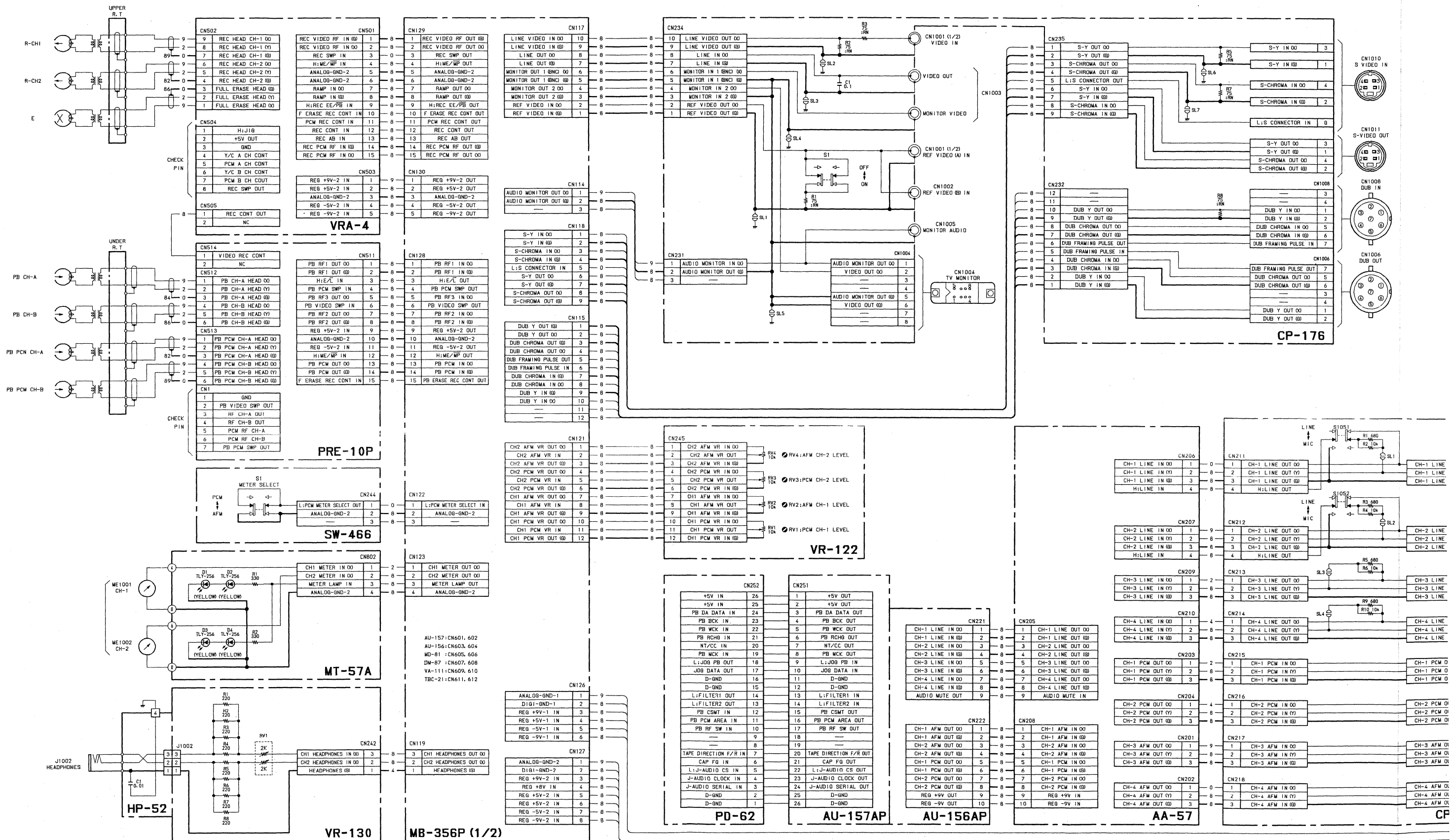
**DC-57P BOARD**  
B Side

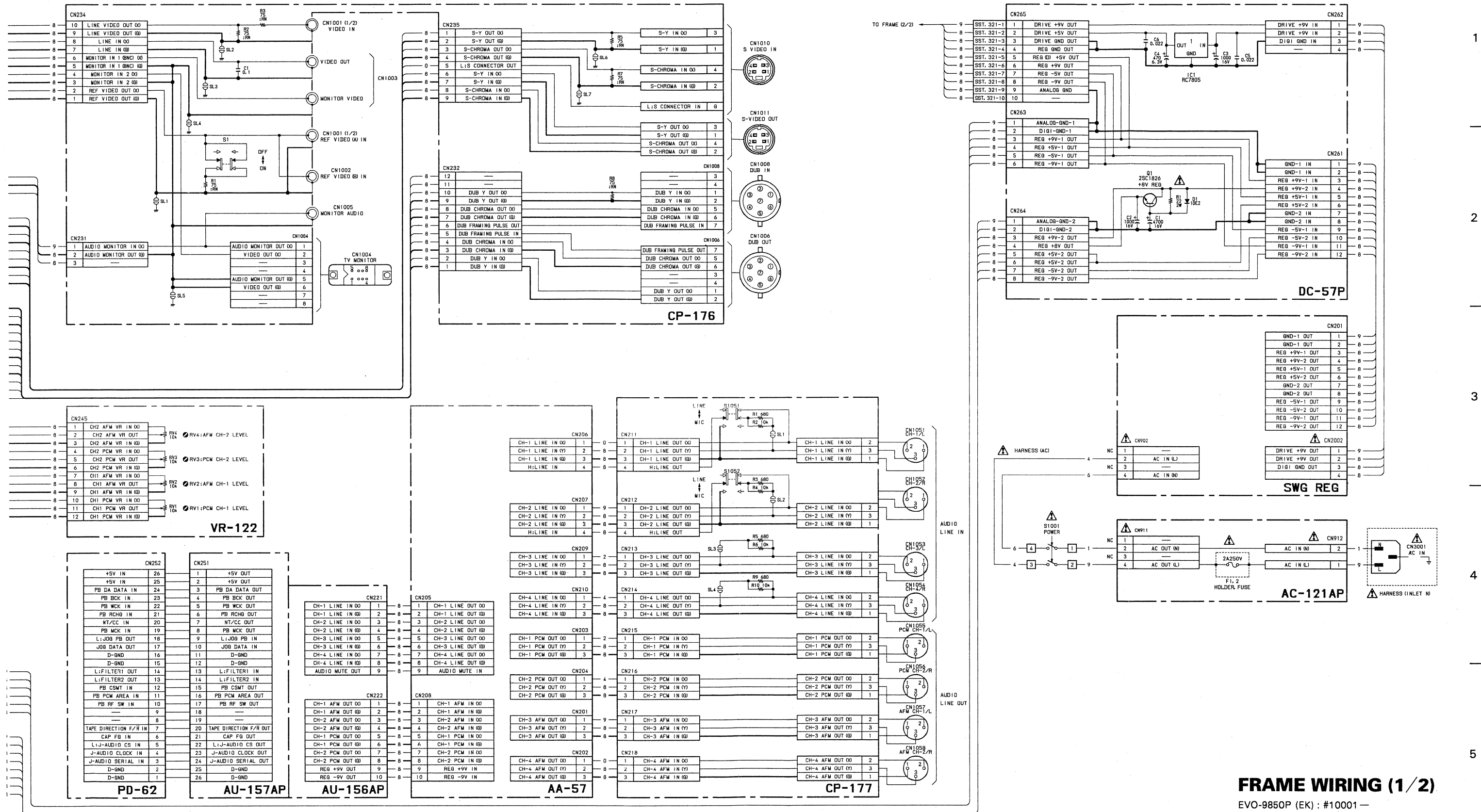


1-643-015-12 B SIDE

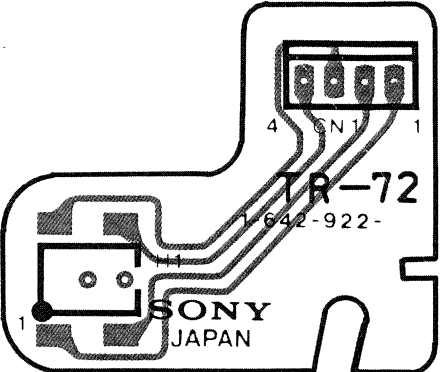
B Side is the same as Soldering Side





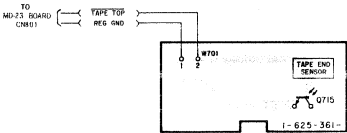


**TR-72 BOARD**  
**Component Side**



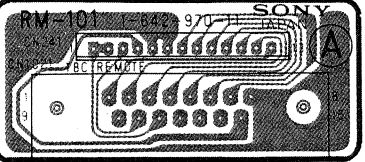
1-642-922-12 COMPONENT SIDE

**TS-74 BOARD**  
**Solder Side**



1-625-361-11 SOLDER SIDE

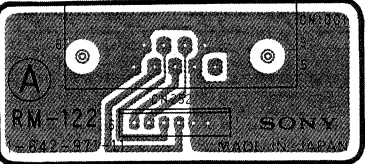
**RM-101 BOARD**  
**A Side**



1-642-970-11 A SIDE

A Side is the same as Component Side

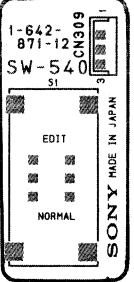
**RM-122 BOARD**  
**A Side**



1-642-971-11 A SIDE

A Side is the same as Component Side

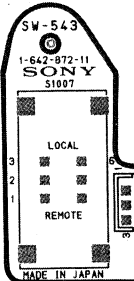
**SW-540 BOARD**  
**A Side**



1-642-871-11, 12 A SIDE

A Side is the same as Component Side

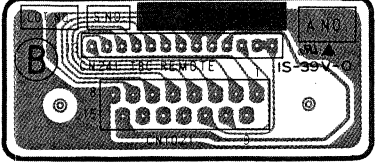
**SW-543 BOARD**  
**A Side**



1-642-871-11 A SIDE

A Side is the same as Component Side

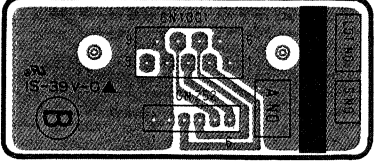
**RM-101 BOARD**  
**B Side**



1-642-970-11 B SIDE

B Side is the same as Soldering Side

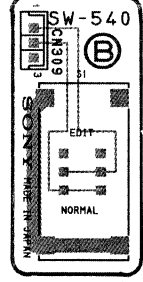
**RM-122 BOARD**  
**B Side**



1-642-971-11 B SIDE

B Side is the same as Soldering Side

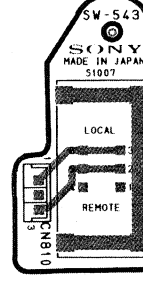
**SW-540 BOARD**  
**B Side**



1-642-871-11, 12 B SIDE

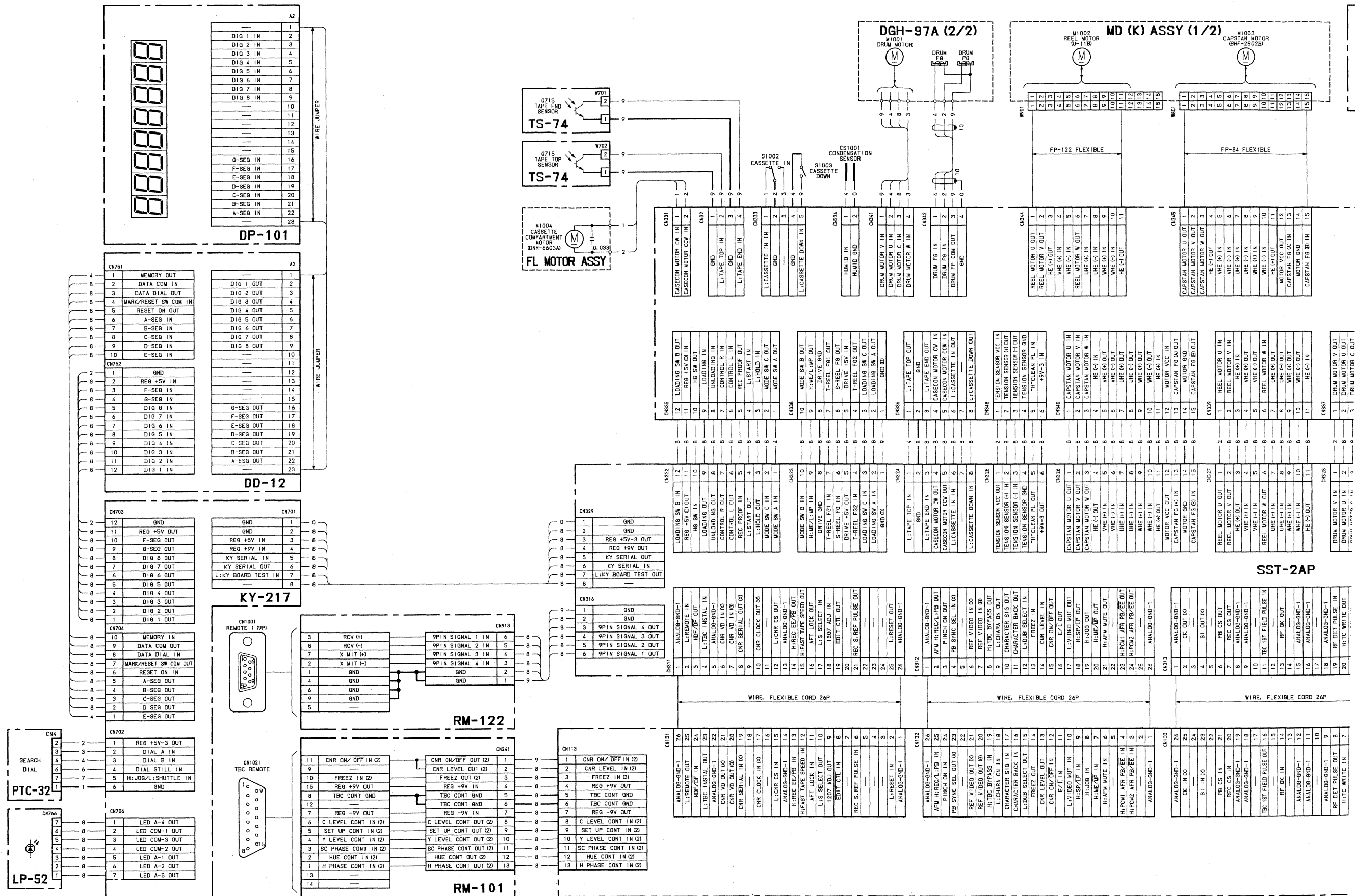
B Side is the same as Soldering Side

**SW-543 BOARD**  
**B Side**



1-642-871-11 B SIDE

B Side is the same as Soldering Side





## SECTION 14

### SPARE PARTS AND FIXTURES

#### 14-1. PARTS INFORMATION

- (1) Components marked with  $\Delta$  on the exploded views and electrical spare list are critical to safe operation. Replace these components with Sony Parts whose part numbers appear in this manual or in service manual supplements published by Sony.
- (2) Replacement Parts supplied from Sony Parts Center will sometimes have a different shape from the original parts. This is due to **improved parts and/or engineering changes or standardization of genuine parts.**  
This manual's exploded views and electrical spare parts list indicate the part numbers of **the standardized genuine parts at the present.** Regarding engineering part changes by the engineering department, refer to Sony service bulletins and service manual supplements.
- (3) The parts marked with S in the SP (Supply Code) column of the exploded views and electrical spare parts lists are normally stocked for replacement purposes. The parts marked with O in the SP column are not normally required for routine service work. Orders for parts marked with O will be processed, but allow for additional delivery time.
- (4) Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- (5) All resistors are in ohms.

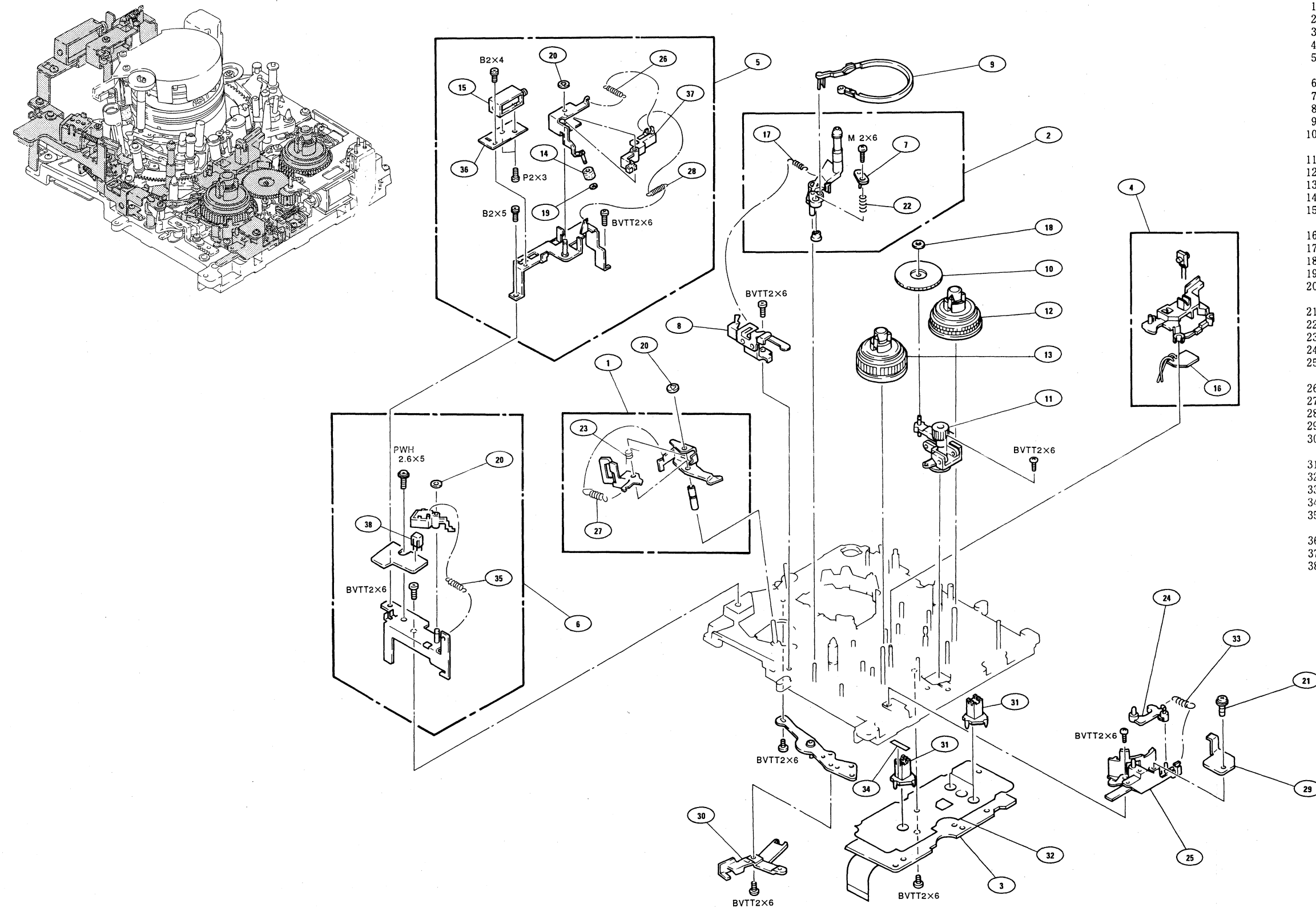
## 14-2. EXPLODED VIEWS

- Exploded views are composed of the following blocks.

- |  |   |
|--|---|
| (1) Reel Table Block .....14-3                       | (6) Cassette-up Compartment Block (2) .....14-8 |
| Tension Regulator Arm Assembly                       |   |
| T Reel Table   | (7) Function Control Chassis Block .....14-9    |
| S Reel Table   | Function Control Panel                          |
| Cleaning Roller Assembly                             | Search Dial Block                               |
| Sensor Assembly                                      |   |
| (2) Threading Ring and Tape Path Blocks .....14-4    | (8) Connector Panel Block .....14-10            |
| Slant Guide Block                                    |   |
| Threading Motor                                      | (9) Main Shassis Block .....14-11               |
| Loading Ring   | Switching Regulator                             |
| T Main Brake   | Mounted Circuit Boards                          |
| S Main Brake   |   |
| Capstan Motor  | (10) Ornamental Panel Block .....14-12          |
| Entrance Guide (K) Assembly                          | Top Plate                                       |
|  | Front Panel                                     |
| (3) Head Drum and Threading Control Blocks .....14-5 | Key Panel                                       |
| Head Drum  | Side Plate                                      |
| L Slider Assembly                                    | Bottom Plate                                    |
| Tape Guides  | Window Assembly                                 |
| Pinch Press Lever                                    |   |
| L-switch Assembly                                    | (11) Card Rack Block .....14-13                 |
|  | Mounted Circuit Boards                          |
| (4) Mechanism Control Block .....14-6                |   |
| M-switch Assembly                                    |   |
| T. S Brake   |   |
| REW Brake  |   |
| S Hard Brake   |   |
| M. Slider  |   |
| Reel Motor   |   |
| (5) Cassette-up Compartment Block (1) .....14-7      |   |
| FL Motor (Cassette Loading)                          |   |
| Tape TOP/END sensor                                  |   |
| RF Shield Plate                                      |   |

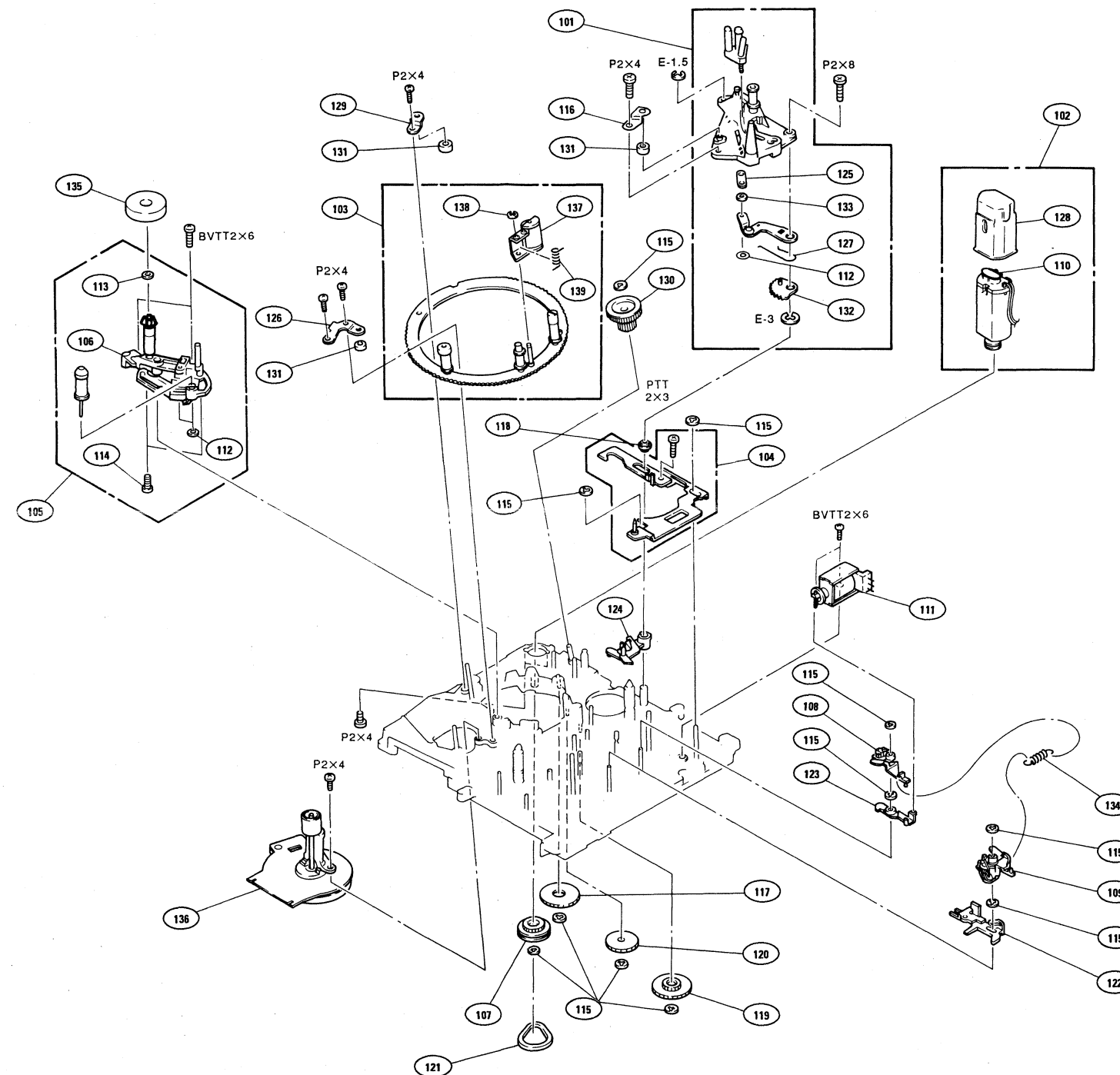
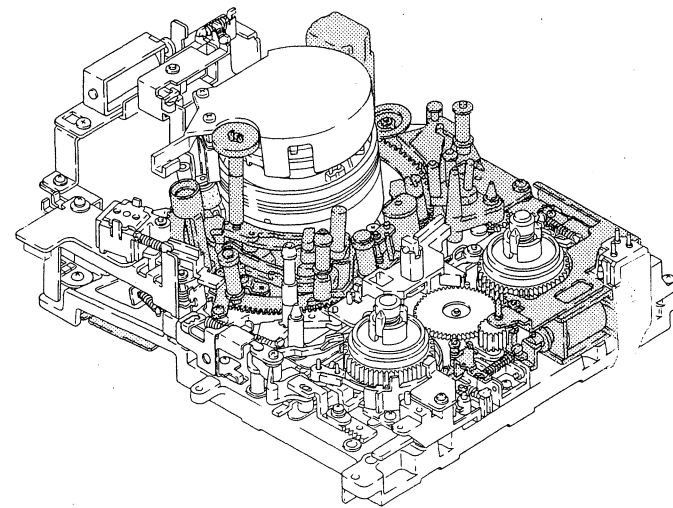


Reel Table Block



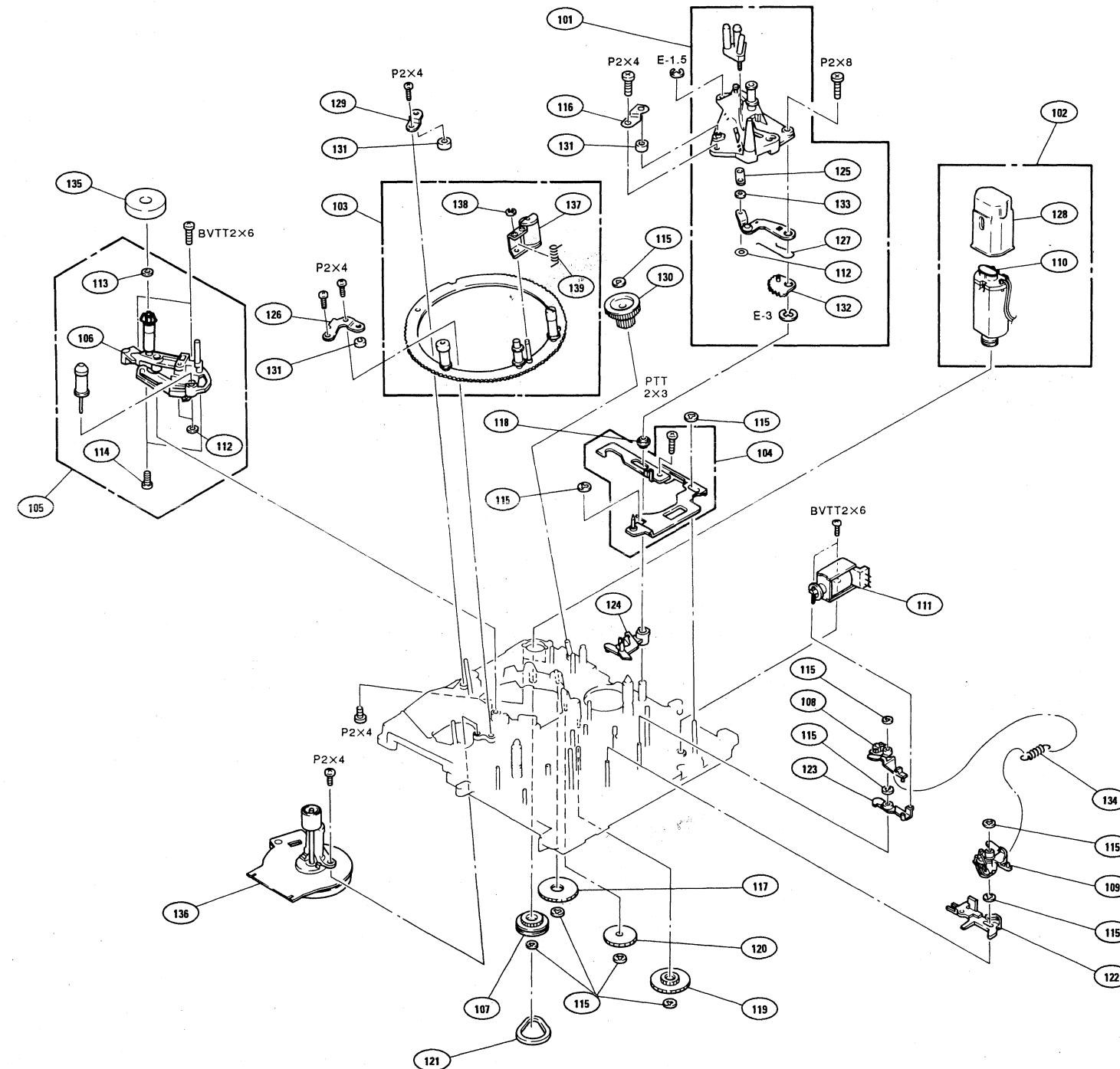
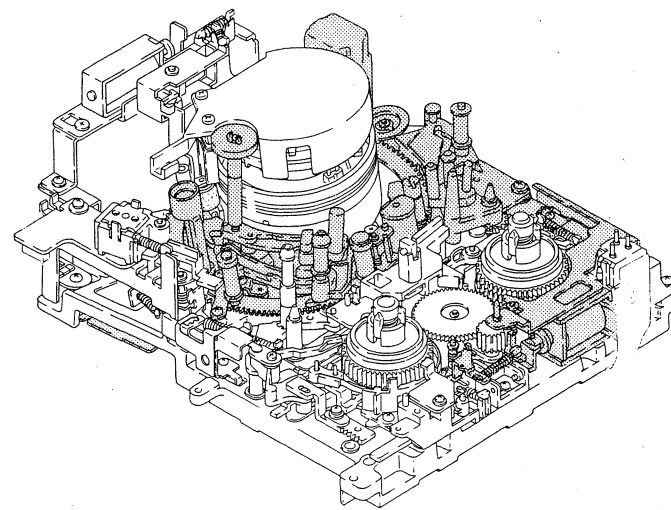
| No. | Part No.     | SP Description                  |
|-----|--------------|---------------------------------|
| 1   | A-7040-008-A | s ARM ASSY, PINCH PRESS         |
| 2   | A-7040-292-A | s ARM ASSY, TENSION REGULATOR   |
| 3   | A-7061-818-A | o MOUNTED CIRCUIT BOARD, RS-31  |
| 4   | A-7070-024-A | o MOUNTED CIRCUIT BOARD, LD-1   |
| 5   | A-8262-346-A | o ROLLER ASSY, CLEANING         |
| 6   | A-8262-577-A | s SENSOR ASSY                   |
| 7   | X-3686-523-1 | o PLATE ASSY, TENSION REGULATOR |
| 8   | X-3686-525-1 | o HOOK ASSY, SPRING             |
| 9   | X-3686-531-1 | s BAND ASSY, TENSION REGULATOR  |
| 10  | X-3686-763-1 | s GEAR (B) ASSY, DRIVING        |
| 11  | X-3711-963-1 | s DRIVING COMPLETE ASSY         |
| 12  | X-3711-998-1 | s TABLE ASSY, REEL, TAKE-UP     |
| 13  | X-3713-427-1 | s TABLE ASSY, REEL, SUPPLY      |
| 14  | X-3166-813-1 | s ROLLER ASSY, HC               |
| 15  | 1-454-445-21 | s SOLENOID, PLUNGER (CLEANING)  |
| 16  | 1-613-367-11 | o PRINTED CIRCUIT BOARD, LD-1   |
| 17  | 3-172-898-01 | s SPRING, TENSION               |
| 18  | 3-315-384-31 | s WASHER, STOPPER               |
| 19  | 3-321-393-11 | s WASHER, STOPPER               |
| 20  | 3-669-465-00 | s WASHER (1.5), STOPPER         |
| 21  | 3-669-480-12 | s SCREW, +PTPHW2                |
| 22  | 3-669-666-00 | s SPRING, COMPRESSION           |
| 23  | 3-686-568-01 | s SPRING, TORSION               |
| 24  | 3-686-637-01 | o BRAKE (S), SOFT               |
| 25  | 3-686-760-01 | o GUIDE, BAND                   |
| 26  | 3-686-882-01 | s SPRING, TENSION               |
| 27  | 3-686-885-01 | s SPRING, TENSION               |
| 28  | 3-686-904-01 | s SPRING, TENSION               |
| 29  | 3-686-991-01 | o STOPPER, REEL TABLE           |
| 30  | 3-712-406-01 | s CLAMP, WIRE                   |
| 31  | 3-712-410-01 | s HOLDER, RS                    |
| 32  | 3-712-411-01 | s INSULATOR, RS                 |
| 33  | 3-179-851-01 | s SPRING, TENSION               |
| 34  | 3-722-175-01 | s SPACER, MD                    |
| 35  | 3-947-120-01 | s SPRING, TENSION               |
| 36  | 3-947-127-01 | o SOLENOID (BASE)               |
| 37  | 3-947-143-02 | o ARM, CR LIMITER               |
| 38  | 8-745-001-07 | s DM-230-1                      |

# Threading Ring and Tape Path Blocks



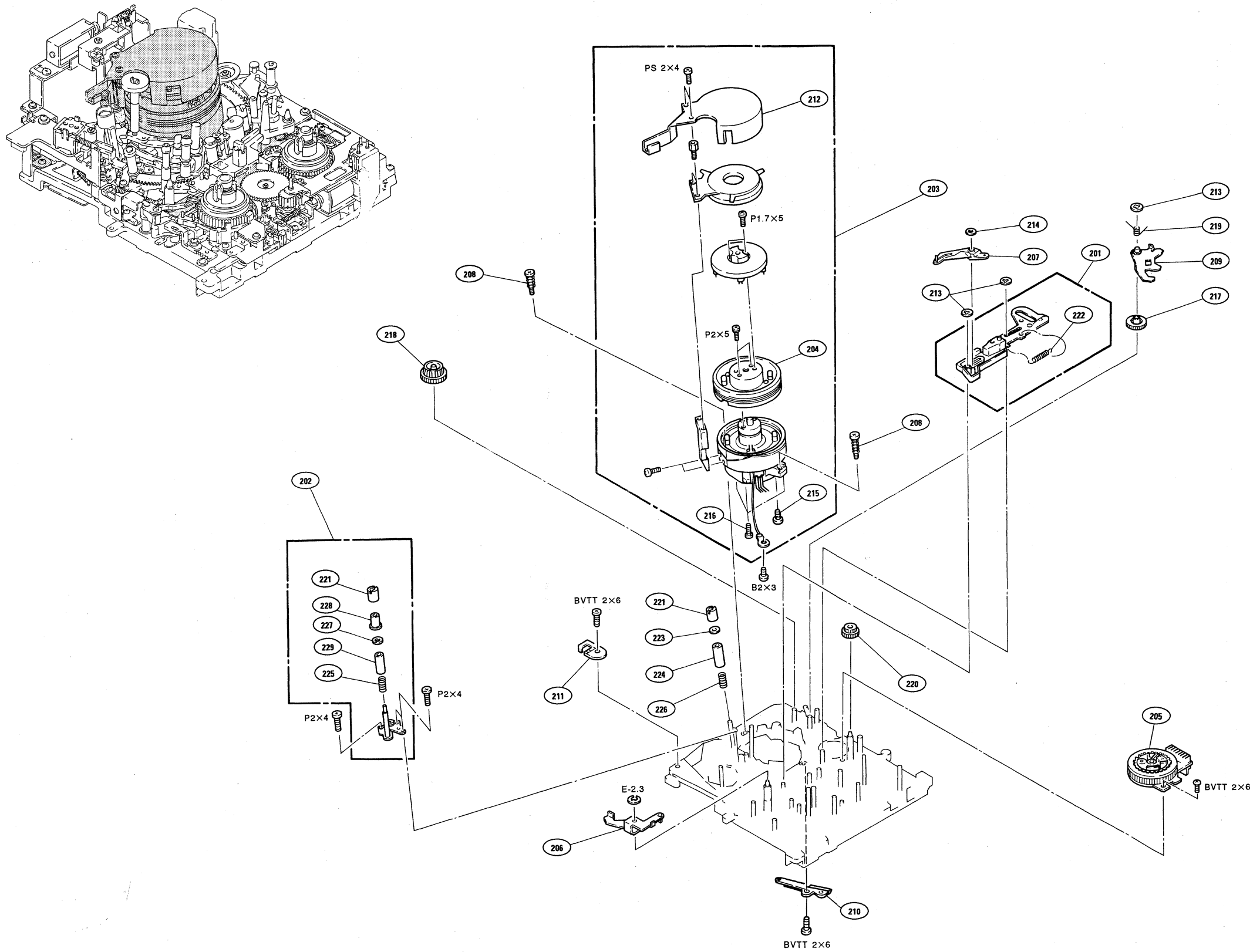
| No. | Part No.     | SP Description                     |
|-----|--------------|------------------------------------|
| 101 | A-7040-001-A | s GUIDE BLOCK ASSY, SLANT          |
| 102 | A-7040-065-A | s MOTOR ASSY, L (THREADING)        |
| 103 | A-7040-123-A | s RING ASSY, LOADING               |
| 104 | A-7040-199-A | s SLIDER (M) BLOCK ASSY, LOCK      |
| 105 | A-7040-294-C | s GUIDE (K) ASSY, ENTRANCE         |
| 106 | X-3166-287-1 | s V BLOCK (K) ASSY, ENTRANCE       |
| 107 | X-3686-514-1 | s GEAR ASSY, No.1                  |
| 108 | X-3686-574-1 | s BRAKE ASSY, MAIN, TAKE-UP        |
| 109 | X-3713-429-1 | s BRAKE ASSY, MAIN, S              |
| 110 | 1-161-057-00 | s CAP, CERAMIC 0.033MFX            |
| 111 | 1-454-377-21 | s SOLENOID, PLUNGER (BLAKE)        |
| 112 | 3-315-384-31 | s WASHER, STOPPER                  |
| 113 | 3-315-414-00 | s WASHER                           |
| 114 | 3-316-938-31 | s SCREW (B1.4x4), TAPPING          |
| 115 | 3-669-465-00 | s WASHER (1.5), STOPPER            |
| 116 | 3-686-503-01 | o RETAINER, ROLLER                 |
| 117 | 3-686-508-01 | s GEAR, No.2                       |
| 118 | 3-686-537-01 | s RETAINER, LOCK SLIDER            |
| 119 | 3-686-544-01 | s GEAR, No.4                       |
| 120 | 3-686-545-01 | s GEAR, No.3                       |
| 121 | 3-686-546-01 | s BELT, L-MOTOR                    |
| 122 | 3-686-629-01 | o SLIDER, SELECTION, UPPER & LOWER |
| 123 | 3-686-635-01 | o ARM, P                           |
| 124 | 3-686-636-04 | o ARM, T, S RELEASE                |
| 125 | 3-686-663-01 | s WASHER, STOPPER, 2 GANG          |
| 126 | 3-686-675-01 | o STOPPER, RING                    |
| 127 | 3-686-701-01 | s SPRING                           |
| 128 | 3-686-757-01 | o CAP, SHIELD, L-MOTOR             |
| 129 | 3-686-911-01 | o PLATE, TOP, ROLLER               |
| 130 | 3-697-518-01 | s GEAR, No.10                      |
| 131 | 3-697-538-01 | s ROLLER, RING                     |
| 132 | 3-699-509-01 | s GEAR, SECTOR                     |
| 133 | 3-701-436-21 | s WASHER, POLYETHYLENE             |
| 134 | 3-713-560-01 | s SPRING, TENSION                  |
| 135 | 3-722-153-01 | s FLY WHEEL                        |
| 136 | 8-835-364-01 | s MOTOR, DC (BHF-2802B) (CAPSTAN)  |
| 137 | X-3686-576-1 | s ARM ASSY, PINCH ROLLER           |
| 138 | 3-315-384-31 | s WASHER, STOPPER (2.5)            |
| 139 | 3-726-704-01 | o SPRING, TORSION (0.29)           |

# Threading Ring and Tape Path Blocks



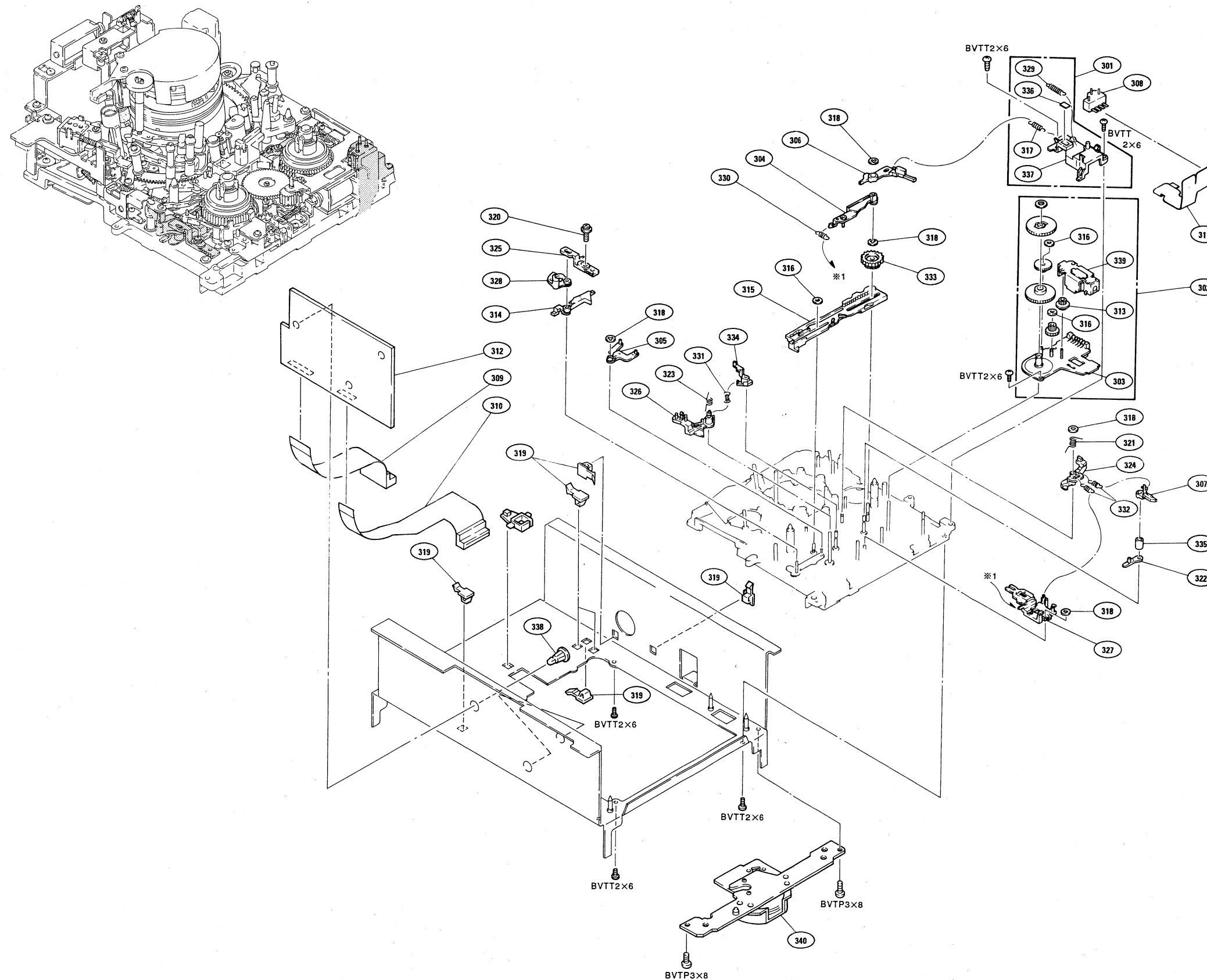
| No. | Part No.     | SP Description                     |
|-----|--------------|------------------------------------|
| 101 | A-7040-001-A | s GUIDE BLOCK ASSY, SLANT          |
| 102 | A-7040-065-A | s MOTOR ASSY, L (THREADING)        |
| 103 | A-7040-123-A | s RING ASSY, LOADING               |
| 104 | A-7040-199-A | s SLIDER (M) BLOCK ASSY, LOCK      |
| 105 | A-7040-294-C | s GUIDE (K) ASSY, ENTRANCE         |
| 106 | X-3166-287-1 | s V BLOCK (K) ASSY, ENTRANCE       |
| 107 | X-3686-514-1 | s GEAR ASSY, No.1                  |
| 108 | X-3686-574-1 | s BRAKE ASSY, MAIN, TAKE-UP        |
| 109 | X-3713-429-1 | s BRAKE ASSY, MAIN, S              |
| 110 | 1-161-057-00 | s CAP, CERAMIC 0.033MFX            |
| 111 | 1-454-377-21 | s SOLENOID, PLUNGER (BLAKE)        |
| 112 | 3-315-384-31 | s WASHER, STOPPER                  |
| 113 | 3-315-414-00 | s WASHER                           |
| 114 | 3-316-938-31 | s SCREW (B1.4x4), TAPPING          |
| 115 | 3-669-465-00 | s WASHER (1.5), STOPPER            |
| 116 | 3-686-503-01 | o RETAINER, ROLLER                 |
| 117 | 3-686-508-01 | s GEAR, No.2                       |
| 118 | 3-686-537-01 | s RETAINER, LOCK SLIDER            |
| 119 | 3-686-544-01 | s GEAR, No.4                       |
| 120 | 3-686-545-01 | s GEAR, No.3                       |
| 121 | 3-686-546-01 | s BELT, L-MOTOR                    |
| 122 | 3-686-629-01 | o SLIDER, SELECTION, UPPER & LOWER |
| 123 | 3-686-635-01 | o ARM, P                           |
| 124 | 3-686-636-04 | o ARM, T, S RELEASE                |
| 125 | 3-686-663-01 | s WASHER, STOPPER, 2 GANG          |
| 126 | 3-686-675-01 | o STOPPER, RING                    |
| 127 | 3-686-701-01 | s SPRING                           |
| 128 | 3-686-757-01 | o CAP, SHIELD, L-MOTOR             |
| 129 | 3-686-911-01 | o PLATE, TOP, ROLLER               |
| 130 | 3-697-518-01 | s GEAR, No.10                      |
| 131 | 3-697-538-01 | s ROLLER, RING                     |
| 132 | 3-699-509-01 | s GEAR, SECTOR                     |
| 133 | 3-701-436-21 | s WASHER, POLYETHYLENE             |
| 134 | 3-713-560-01 | s SPRING, TENSION                  |
| 135 | 3-722-153-01 | s FLY WHEEL                        |
| 136 | 8-835-364-01 | s MOTOR, DC (BHF-2802B) (CAPSTAN)  |
| 137 | X-3686-576-1 | s ARM ASSY, PINCH ROLLER           |
| 138 | 3-315-384-31 | s WASHER, STOPPER (2.5)            |
| 139 | 3-726-704-01 | o SPRING, TORSION (0.29)           |

Head Drum and Threading Control Blocks



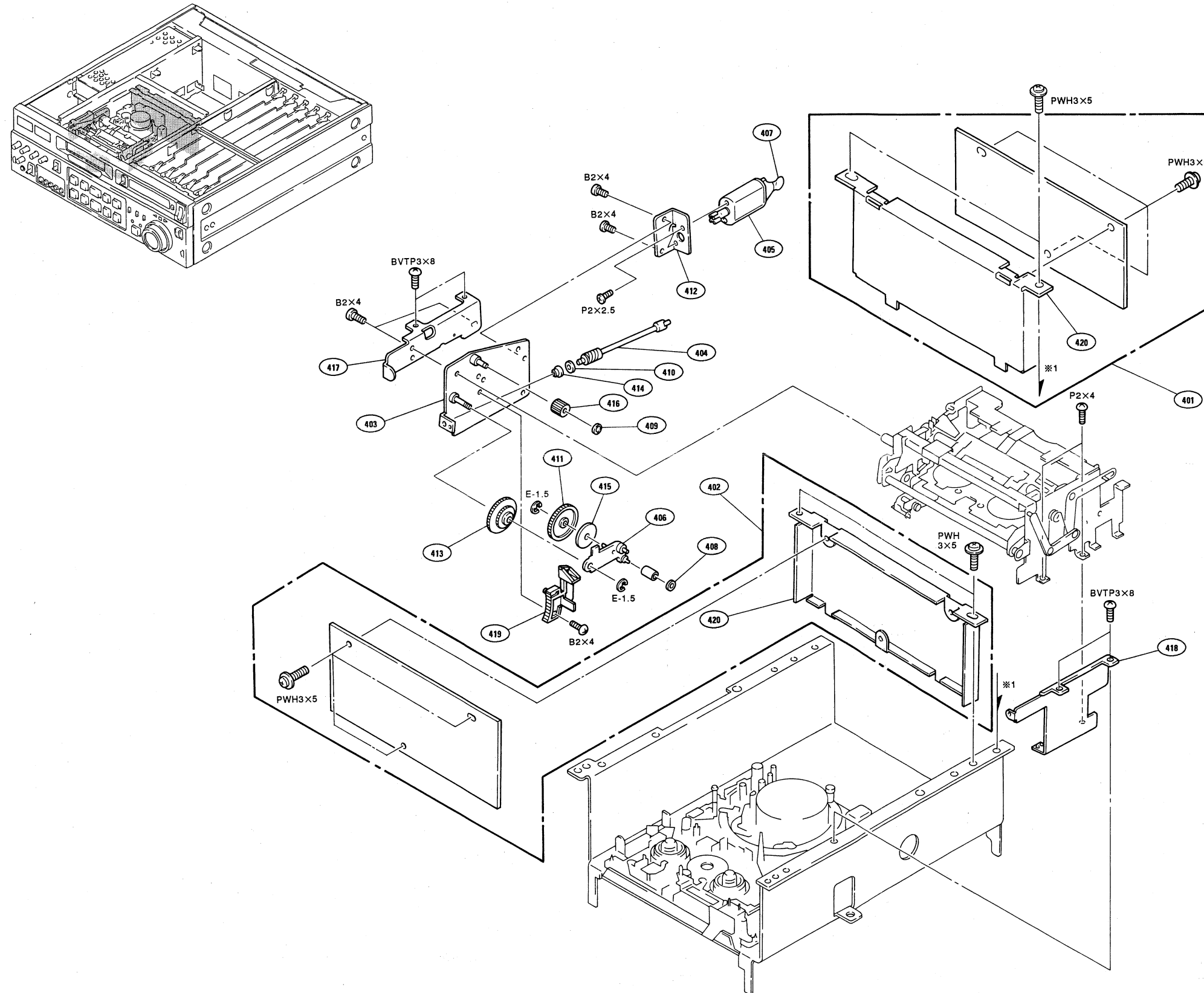
| No. | Part No.     | SP Description                      |
|-----|--------------|-------------------------------------|
| 201 | A-7040-010-A | SLIDER ASSY, L                      |
| 202 | A-7040-383-A | GUIDE BLOCK COMPLETE ASSY, #5       |
| 203 | A-8260-641-A | DRUM ASSY (DGH-98A-R)               |
| 204 | A-8260-642-A | DRUM ASSY, UPPER, ROTARY (DGR-98-R) |
| 205 | X-3166-289-1 | L-SW ASSY                           |
| 206 | X-3686-509-1 | LEVER ASSY, PINCH PRESS             |
| 207 | X-3686-518-3 | ARM ASSY, TENSION REGULATOR         |
| 208 | X-3686-569-1 | SCREW ASSY, FITTING                 |
| 209 | X-3686-579-1 | CHANGE ASSY, DRIVE                  |
| 210 | 1-535-535-11 | TERMINAL, SHAFT GROUND              |
| 211 | 1-806-682-00 | SENSOR, DEW CONDENSATION            |
| 212 | 3-176-836-01 | COVER, DRUM                         |
| 213 | 3-315-384-31 | WASHER, STOPPER                     |
| 215 | 3-686-423-01 | SCREW, FITTING, STATOR              |
| 216 | 3-686-458-03 | SCREW, (P1.4x3.5), TAPPING          |
| 217 | 3-686-535-01 | GEAR, No. 8                         |
| 218 | 3-686-539-01 | GEAR, No. 9                         |
| 219 | 3-686-540-01 | SPRING, TORSION                     |
| 220 | 3-686-702-01 | GEAR, DRIVING, GUIDE, SLANT         |
| 221 | 3-686-724-01 | NUT, GUIDE                          |
| 222 | 3-686-886-01 | SPRING, TENSION                     |
| 223 | 3-686-894-02 | FLANGE, #3, #4 GUIDE                |
| 224 | 3-178-030-01 | GUIDE, #4                           |
| 225 | 3-699-514-01 | SPRING, COMPRESSION                 |
| 226 | 3-699-609-01 | SPRING, COMPRESSION                 |
| 227 | 3-699-512-01 | FLANGE, No. 5 GUIDE                 |
| 228 | 3-699-513-01 | BOSS, No5 GUIDE                     |
| 229 | 3-952-240-01 | GUIDE, No. 5                        |

## Mechanism Control Block



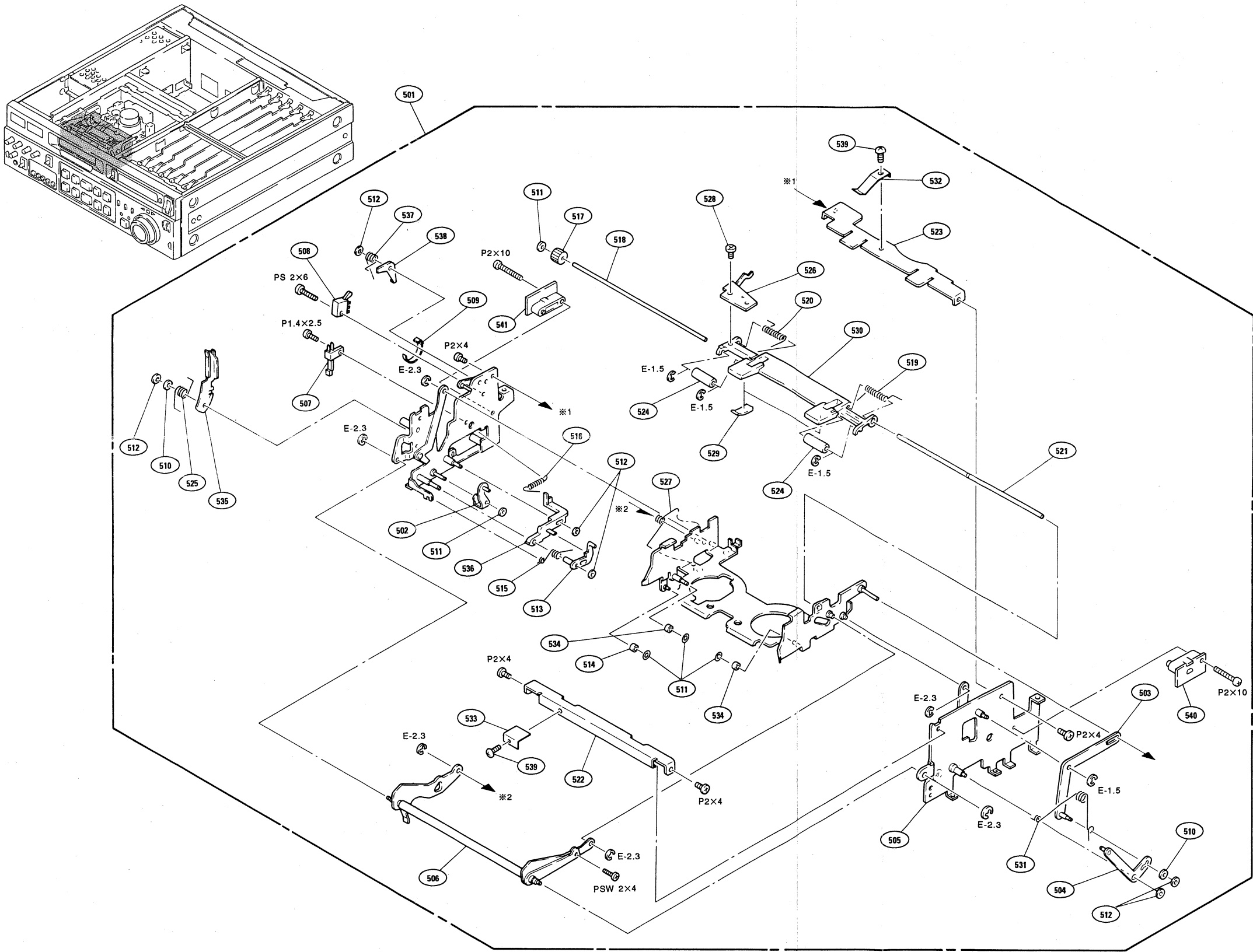
| No. | Part No.     | SP Description                             |
|-----|--------------|--|
| 301 | A-7040-198-A | s COVER (M) ASSY, C MOTOR                  |
| 302 | A-7040-293-A | s M-SW ASSY                                |
| 303 | A-7071-498-A | o MOUNTED CIRCUIT BOARD, MS-36             |
| 304 | X-3686-528-4 | o ARM ASSY, B RELEASE                      |
| 305 | X-3686-530-1 | o ARM (A) ASSY, SELECTION                  |
| 306 | X-3711-987-2 | s BRAKE ASSY, T.S                          |
| 307 | X-3711-993-1 | s BRAKE ASSY, REW                          |
| 308 | 1-572-298-21 | s SWITCH, PUSH (REC PROOF/MPHG/ME/MP)      |
| 309 | A-7070-624-A | o FP-84 MOUNTED CIRCUIT BOARD, (FLEXIBLE)  |
| 310 | A-7070-625-A | o FP-122 MOUNTED CIRCUIT BOARD, (FLEXIBLE) |
| 311 | 1-630-923-11 | o FP-206 FLEXIBLE BOARD                    |
| 312 | 1-642-953-14 | o PRINTED CIRCUIT BOARD, CN-551P           |
| 313 | 3-172-901-01 | s WHEEL, WORM                              |
| 314 | 3-172-908-01 | o ARM, MODE                                |
| 315 | 3-172-909-01 | s SLIDER, M                                |
| 316 | 3-315-384-31 | s WASHER, STOPPER                          |
| 317 | 3-714-035-01 | s SPRING, TENSION                          |
| 318 | 3-669-465-00 | s WASHER (1.5), STOPPER                    |
| 319 | 3-671-150-11 | o CLAMP                                    |
| 320 | 3-686-528-01 | s SCREW (2x2.6)                            |
| 321 | 3-686-579-01 | s SPRING                                   |
| 322 | 3-686-580-01 | o ARM, SET-UP                              |
| 323 | 3-686-603-04 | s SPRING                                   |
| 324 | 3-686-634-01 | o ARM, RL                                  |
| 325 | 3-686-642-01 | o PLATE, ADJUSTMENT, BAND                  |
| 326 | 3-686-644-01 | o ARM, BAND                                |
| 327 | 3-686-656-01 | o SLIDER, B RELEASE                        |
| 328 | 3-686-755-01 | s DISK, EJECT                              |
| 329 | 3-722-110-01 | s SPRING, TENSION                          |
| 330 | 3-686-903-01 | s SPRING, TENSION                          |
| 331 | 3-686-905-02 | s SPRING, TENSION                          |
| 332 | 3-686-906-01 | s SPRING, TENSION                          |
| 333 | 3-686-909-01 | s GEAR, MODE OUTPUT                        |
| 334 | 3-686-996-01 | s BRAKE (S), HARD                          |
| 335 | 3-716-933-01 | s SPACER, REW BRAKE                        |
| 336 | 3-716-963-01 | s SHOE, C MOTOR COVER                      |
| 337 | 3-739-107-02 | s COVER (M), C MOTOR                       |
| 338 | 4-912-181-11 | o SUPPORT, PC                              |
| 339 | 8-835-138-01 | s MOTOR, DC (DNR-5301B) (CONTROL)          |
| 340 | 8-835-304-11 | s MOTOR, DCU-11B (REEL)                    |

## Cassette Up Compartment Block (1)



| No. | Part No.     | SP Description                          |
|-----|--------------|---|
| 401 | A-8275-234-A | o COMPLETE PCB, VRA-4P                  |
| 402 | A-8271-857-A | o COMPLETE PCB, PRE-10P                 |
| 403 | X-3711-934-1 | o PLATE SUB ASSY BLOCK                  |
| 404 | X-3711-935-3 | s SHAFT ASSY, WORM                      |
| 405 | X-3711-936-1 | s MOTOR ASSY, FL (CASSETTE COMPARTMENT) |
| 406 | X-3714-193-1 | s LEVER ASSY (B), GEAR                  |
| 407 | 1-161-057-00 | s CAP, CERAMIC 0.033MFX                 |
| 408 | 3-315-414-31 | s WASHER                                |
| 409 | 3-669-465-00 | s WASHER (1.5), STOPPER                 |
| 410 | 3-701-437-11 | s WASHER                                |
| 411 | 3-713-430-01 | s GEAR (B)                              |
| 412 | 3-713-431-01 | o BRACKET, MOTOR                        |
| 413 | 3-713-433-01 | s GEAR (A)                              |
| 414 | 3-713-439-01 | s BEARING                               |
| 415 | 3-713-441-01 | o SPRING, LEFT                          |
| 416 | 3-713-452-01 | s GEAR (C)                              |
| 417 | 3-724-140-01 | o BRACKET (LEFT)                        |
| 418 | 3-724-141-01 | o BRACKET (RIGHT)                       |
| 419 | 3-724-913-03 | s RACK                                  |
| 420 | 3-947-136-01 | o PLATE SHIELD, RF                      |

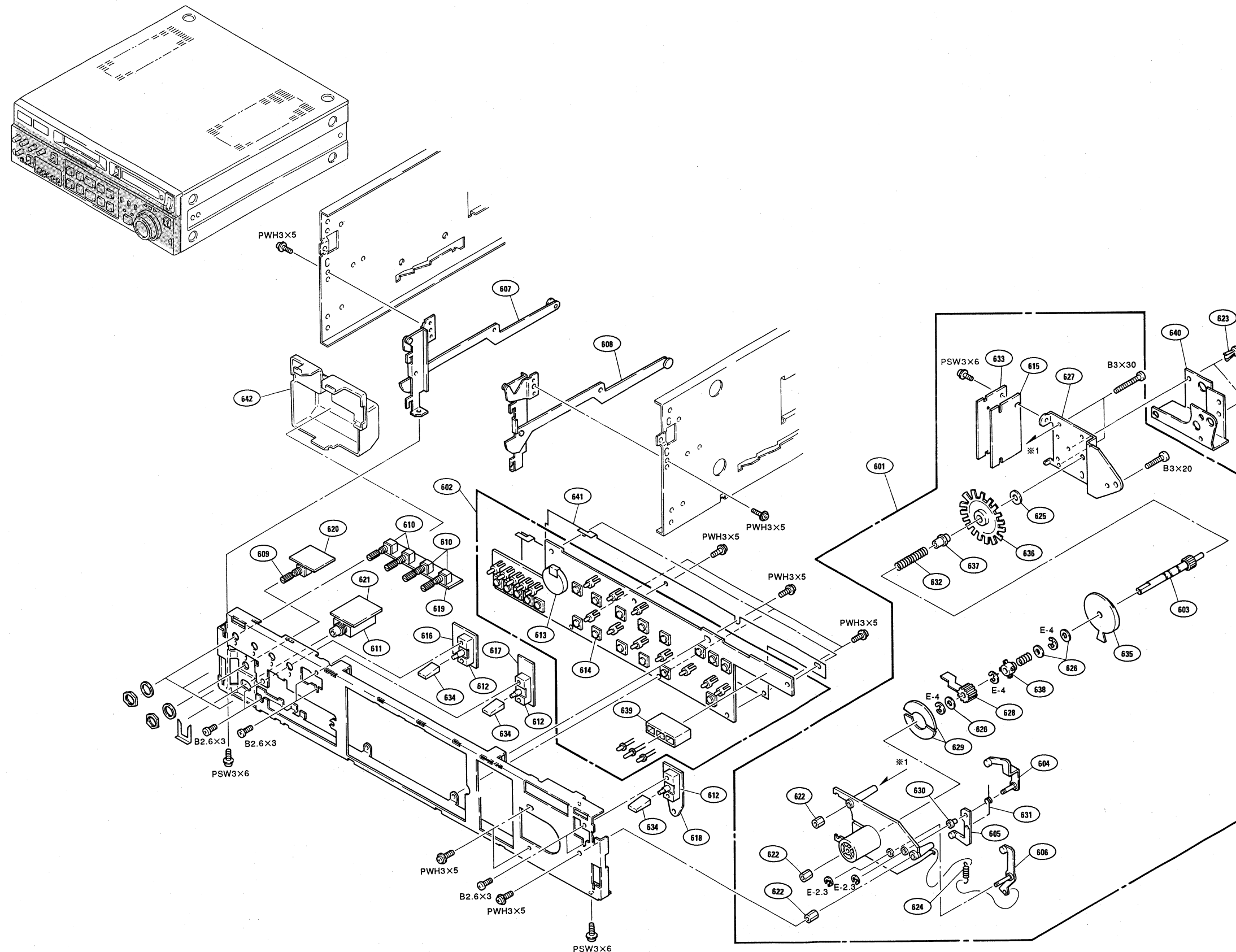
Cassette Up Compartment Block (2)



| No. | Part No.     | SP Description                         |
|-----|--------------|--|
| 501 | A-8262-783-A | s CASSETTE COMPARTMENT BLOCK ASSY      |
| 502 | X-3686-541-1 | o CLAW ASSY, LOCK                      |
| 503 | X-3711-930-1 | s LEVER ASSY, HOLDER                   |
| 504 | X-3711-931-4 | s LEVER ASSY, DOOP                     |
| 505 | X-3711-932-1 | o PLATE (A) ASSY, SIDE                 |
| 506 | X-3711-937-1 | o JOINT ASSY                           |
| 507 | 1-553-226-00 | s SWITCH, LEAF                         |
| 508 | 1-570-407-11 | s SWITCH, SLIDE                        |
| 509 | 3-337-402-01 | o BAND, BINDING                        |
| 510 | 3-533-073-01 | s WASHER                               |
| 511 | 3-578-265-11 | s WASHER, STOPPER                      |
| 512 | 3-669-465-00 | s WASHER (1.5), STOPPER                |
| 513 | 3-686-692-01 | s PREVENTION, SLIDER                   |
| 514 | 3-686-693-01 | o ROLLER, LOCK                         |
| 515 | 3-686-694-01 | s SPRING, TORTION                      |
| 516 | 3-696-047-01 | s SPRING, TENSION                      |
| 517 | 3-713-429-01 | s GEAR (D)                             |
| 518 | 3-713-440-01 | o SHAFT, ROLLER                        |
| 519 | 3-713-442-01 | s SPRING (RIGHT)                       |
| 520 | 3-713-445-01 | s SPRING (LEFT)                        |
| 521 | 3-713-457-01 | o SHAFT, JOINT                         |
| 522 | 3-713-458-01 | o REINFORCEMENT                        |
| 523 | 3-713-462-03 | o STOPPER, HOLDER                      |
| 524 | 3-713-466-01 | s ROLLER                               |
| 525 | 3-713-488-01 | s SPRING (2), TORTION                  |
| 526 | 3-724-912-01 | s PLATE, FUNCTION, LEVER               |
| 527 | 3-713-620-01 | s SPRING (1), TORTION                  |
| 528 | 3-713-622-01 | s SCREW (M1.3x4), TAPPING, 0           |
| 529 | 3-713-625-01 | s SHOE, BRAKE                          |
| 530 | 3-713-626-01 | s COVER, MULTI                         |
| 531 | 3-713-628-01 | s SPRING, TORTION                      |
| 532 | 3-713-658-01 | s SPRING                               |
| 533 | 3-716-921-01 | s SPRING, LEAF                         |
| 534 | 3-719-590-01 | s ROLLER, ASSIST                       |
| 535 | 3-721-125-01 | s LEVER, LOCK                          |
| 536 | 3-721-136-01 | s SLIDER, LOCK                         |
| 537 | 3-721-163-01 | s SPRING                               |
| 538 | 3-721-166-01 | s LEVER, SWITCH                        |
| 539 | 3-739-116-01 | s SCREW (2X3), PS                      |
| 540 | A-7070-627-A | o MOUNTED CIRCUIT BOARD, TS-74 (RIGHT) |
| 541 | A-7070-628-A | o MOUNTED CIRCUIT BOARD, TS-74 (LEFT)  |



Function Control Chassis Block

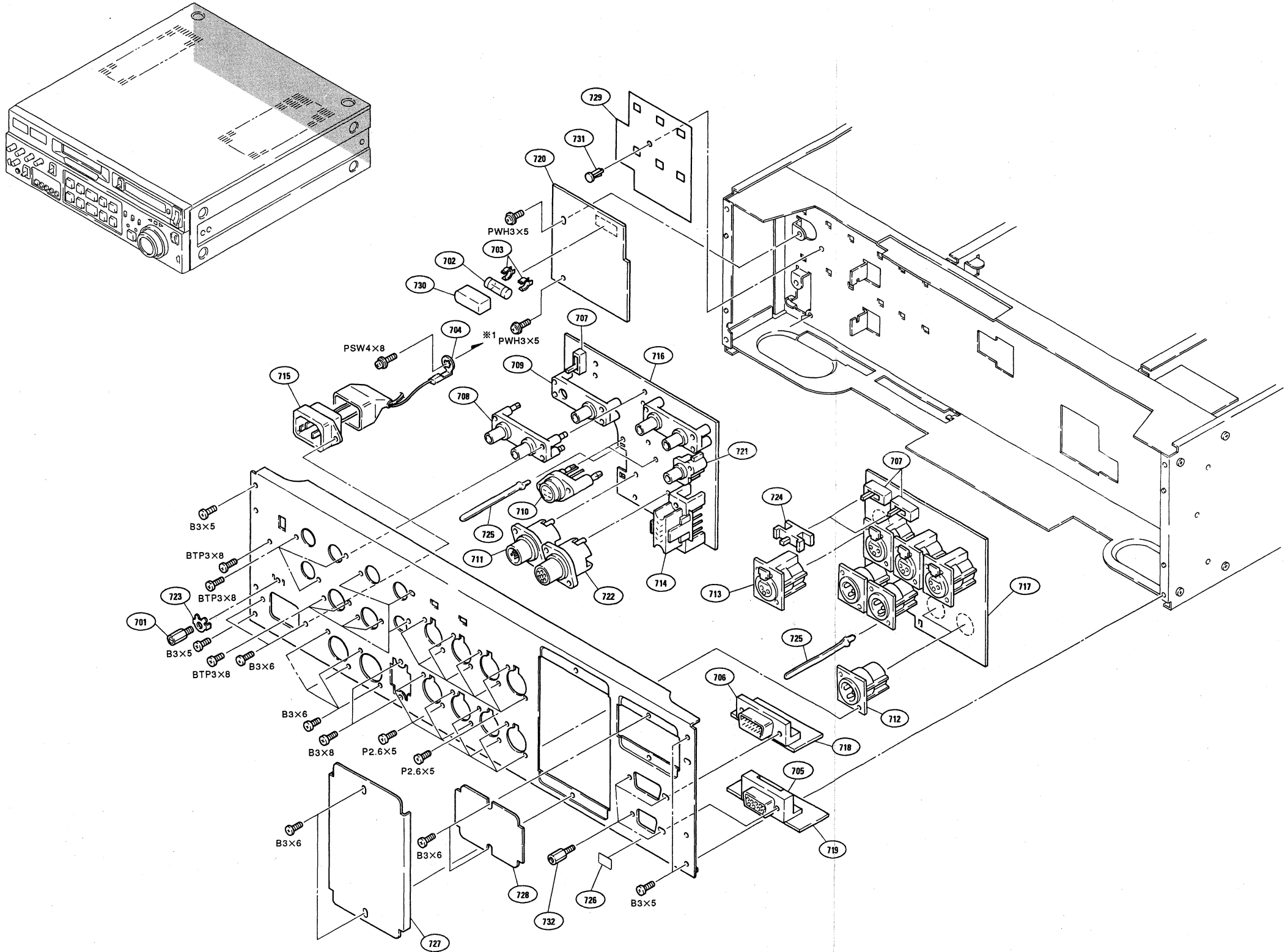


| No. | Part No.     | SP Description                  |
|-----|--------------|---------------------------------|
| 601 | A-6734-238-C | s DIAL BLOCK ASSY, SERCH        |
| 602 | A-8271-230-A | o MOUNTED CIRCUIT BOARD, KY-217 |
| 603 | X-3717-226-1 | o SHAFT SUB ASSY, MAIN          |
| 604 | X-3717-227-1 | o ARM (RIGHT) ASSY, S10         |
| 605 | X-3717-228-1 | o ARM (LEFT) ASSY, S10          |
| 606 | X-3717-229-1 | o ARM ASSY, RETURN              |
| 607 | X-3738-903-1 | o HINGE (LEFT) ASSY             |
| 608 | X-3738-904-1 | o HINGE (RIGHT) ASSY            |
| 609 | 1-237-703-11 | s RES, VAR, CARBON 2k/2k        |
| 610 | 1-238-483-11 | s RES, VAR, CARBON 5k           |
| 611 | 1-507-854-00 | s JACK, LARGE TYPE              |
| 612 | 1-516-961-00 | s SWITCH, LEVER SLIDE           |
| 613 | 1-528-229-11 | o BATTERY, LITHIUM (CR-2450)    |
| 614 | 1-552-539-00 | s SWITCH, KEY BOARD             |
| 615 | 1-622-638-11 | o PRINTED CIRCUIT BOARD, PTC-32 |
| 616 | 1-642-870-11 | o PRINTED CIRCUIT BOARD, SW-466 |
| 617 | 1-642-871-11 | o PRINTED CIRCUIT BOARD, SW-540 |
| 618 | 1-642-872-11 | o PRINTED CIRCUIT BOARD, SW-543 |
| 619 | 1-642-873-11 | o PRINTED CIRCUIT BOARD, VR-122 |
| 620 | 1-642-874-11 | o PRINTED CIRCUIT BOARD, VR-130 |
| 621 | 1-642-875-11 | o PRINTED CIRCUIT BOARD, HP-52  |
| 622 | 2-280-622-11 | o SUPPORT (M3), HEXAGON         |
| 623 | 3-531-576-01 | s RIVET                         |
| 624 | 3-639-371-00 | s SPRING, TENSION               |
| 625 | 3-662-048-00 | s WASHER, BRACKET               |
| 626 | 3-701-443-21 | s WASHER, SDIA.                 |
| 627 | 3-717-315-01 | o PLATE, BOTTOM, SD             |
| 628 | 3-717-316-03 | o GUIDE, LOCK IN                |
| 629 | 3-717-317-01 | o PLATE, CLUTCH                 |
| 630 | 3-717-318-01 | o BEARING, S10                  |
| 631 | 3-717-319-01 | o SPRING, TORSION               |
| 632 | 3-717-320-01 | o SPRING, COMPRESSION           |
| 633 | 3-717-321-01 | o PROTECTOR, PTC                |
| 634 | 3-717-382-01 | s KNOB, LEVER SW                |
| 635 | 3-717-417-01 | o CAM                           |
| 636 | 3-717-418-01 | o PLATE                         |
| 637 | 3-717-553-01 | o BEARING, SD                   |
| 638 | 3-717-546-02 | o GUIDE, LOCK OUT               |
| 639 | 3-718-657-01 | o HOLDER, LED                   |
| 640 | 3-718-771-01 | o COVER (U), SD                 |
| 641 | 3-947-152-01 | o PROTECTOR, KY                 |
| 642 | 3-947-147-01 | o PROTECTOR, HVR                |

CONNECTOR PANEL BLOCK

CONNECTOR PANEL BLOCK

Connector Panel Block

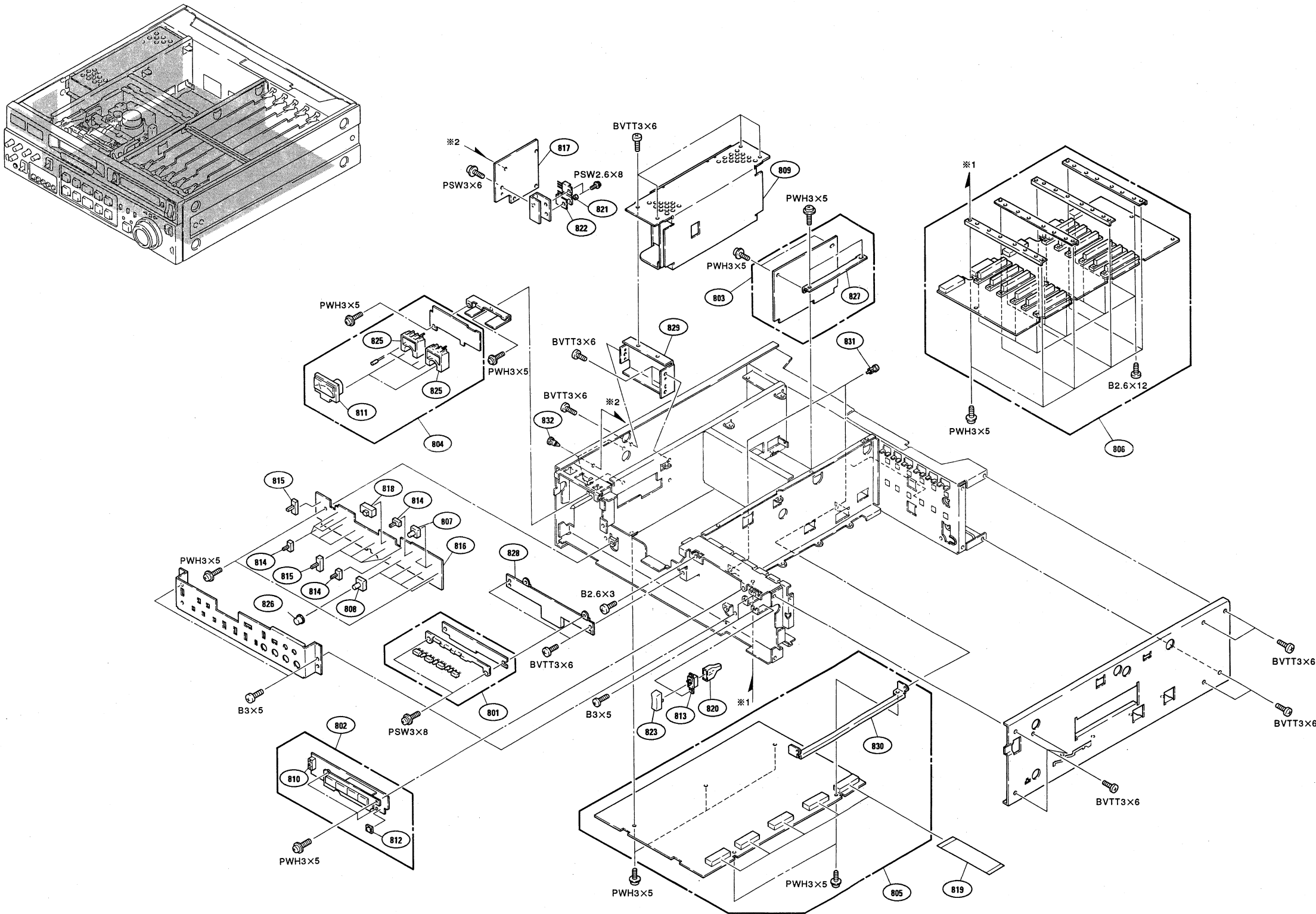


| No. | Part No.       | SP Description                    |
|-----|----------------|-----------------------------------|
| 701 | X-2068-004-0   | s TERMINAL ASSY                   |
| 702 | Δ 1-532-203-00 | s FUSE, TIME-LAG 2A               |
| 703 | 1-533-189-11   | s HOLDER, FUSE                    |
| 704 | 1-535-316-11   | s TERMINAL, GROUND (M4)           |
| 705 | 1-563-770-11   | s SOCKET, D-SUB CONNECTOR 9P      |
| 706 | 1-566-319-11   | o PLUG, D-SUB CONNECTOR 15P       |
| 707 | 1-570-145-11   | s SWITCH, SLIDE                   |
| 708 | 1-573-582-11   | s CONNECTOR, BNC (RECEPTACLE)     |
| 709 | 1-573-583-11   | s CONNECTOR, BNC (RECEPTACLE)     |
| 710 | 1-573-590-12   | s CONNECTOR, (S) TERMINAL 4P      |
| 711 | 1-573-591-11   | s CONNECTOR, (R-F)                |
| 712 | 1-573-594-11   | s CONNECTOR, XLR TYPE 3P          |
| 713 | 1-573-593-11   | s CONNECTOR, XLR TYPE 3P          |
| 714 | 1-573-602-11   | s CONNECTOR, (DIP TYPE) 8P        |
| 715 | Δ 1-580-375-11 | s INLET 3P                        |
| 716 | 1-642-967-11   | o PRINTED CIRCUIT BOARD, CP-176   |
| 717 | 1-642-968-11   | o PRINTED CIRCUIT BOARD, CP-177   |
| 718 | 1-642-970-11   | o PRINTED CIRCUIT BOARD, RM-101   |
| 719 | 1-642-971-11   | o PRINTED CIRCUIT BOARD, RM-122   |
| 720 | 1-643-013-21   | o PRINTED CIRCUIT BOARD, AC-121AP |
| 721 | 1-691-273-11   | s JACK, PIN 1P                    |
| 722 | 1-695-195-11   | s CONNECTOR (ROUND TYPE) 7P       |
| 723 | 2-068-008-00   | s WASHER                          |
| 724 | 3-171-450-01   | o ADAPTOR, SW                     |
| 725 | 3-683-631-01   | o CLAMP                           |
| 726 | 3-703-080-31   | o LABEL (TOP), SUB CAUTION        |
| 727 | 3-733-627-01   | o COVER, IF                       |
| 728 | 3-947-113-01   | o PANEL, TC BLANK                 |
| 729 | 3-947-116-01   | o INSULATOR, AC                   |
| 730 | 4-601-472-00   | o COVER, FUSE                     |
| 731 | 4-818-403-00   | s RIVET, NYLON                    |
| 732 | 3-668-459-11   | o SCREW, CONNECTOR                |

# MAIN CHASSIS BLOCK

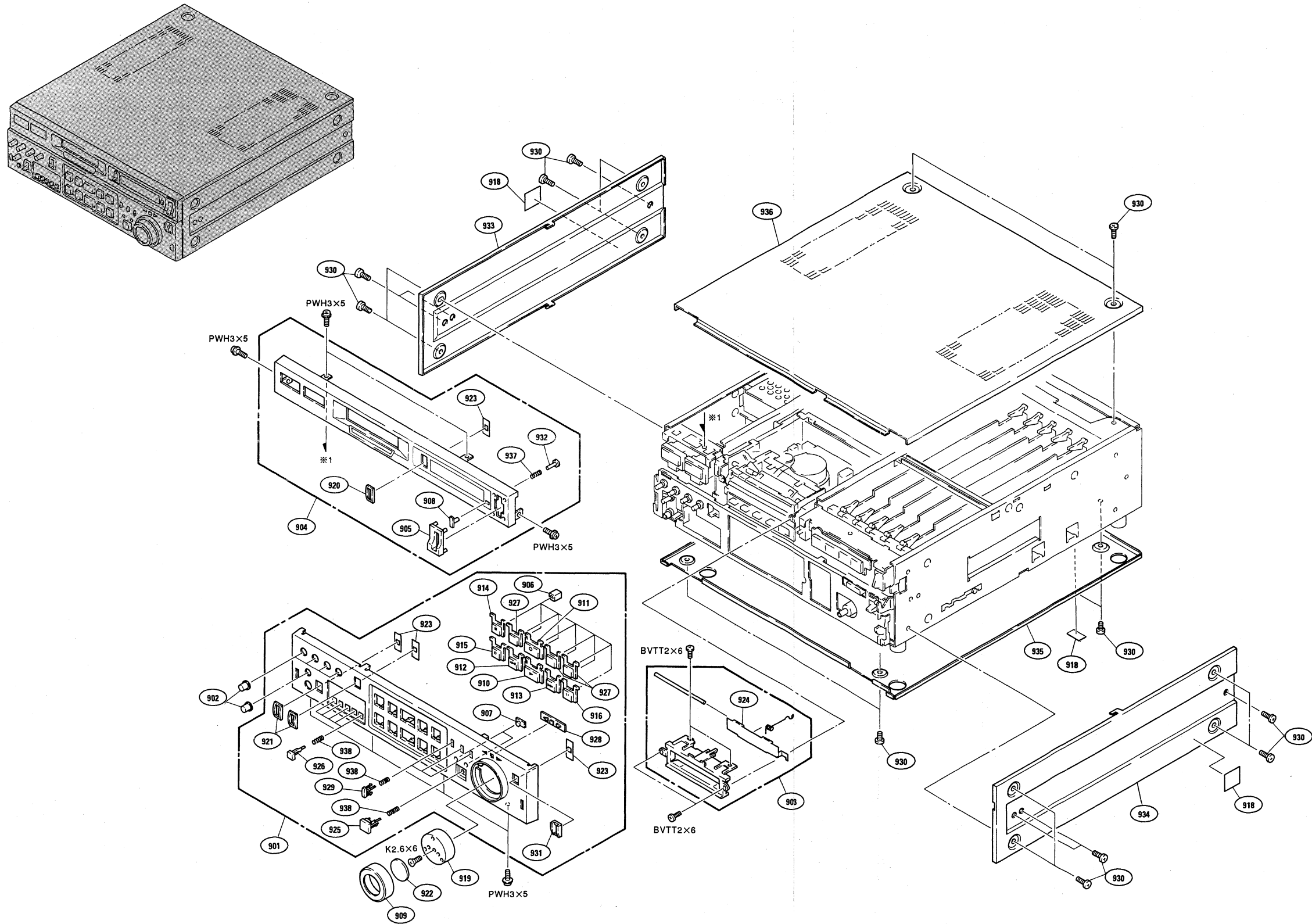
# MAIN CHASSIS BLOCK

## Main Chassis Block



| No. | Part No.     | SP Description                   |
|-----|--------------|----------------------------------|
| 801 | A-7061-770-A | o MOUNTED CIRCUIT BOARD, LP-52   |
| 802 | A-7061-772-A | o MOUNTED CIRCUIT BOARD, DD-12   |
| 803 | A-8271-902-A | o MOUNTED CIRCUIT BOARD, AA-57P  |
| 804 | A-8271-224-A | o MOUNTED CIRCUIT BOARD, MT-57A  |
| 805 | A-8271-859-A | o MOUNTED CIRCUIT BOARD, SST-2AP |
| 806 | A-8276-538-A | o MOUNTED CIRCUIT BOARD, MB-356P |
| 807 | 1-241-856-11 | s RES, VAR, CARBON 5k            |
| 808 | 1-241-918-11 | s RES, VAR, CARBON 5k            |
| 809 | 1-413-820-11 | s SWITCHING REGULATOR            |
| 810 | 1-516-995-00 | s SWITCH, LEVER SLIDE            |
| 811 | 1-520-506-11 | s METER, AUDIO LEVEL             |
| 812 | 1-552-539-00 | s SWITCH, KEY BOARD              |
| 813 | 1-570-117-41 | s SWITCH, ROCKER (AC POWER)      |
| 814 | 1-570-145-11 | s SWITCH, SLIDE                  |
| 815 | 1-572-374-11 | s SWITCH, SLIDE                  |
| 816 | 1-642-952-13 | o PRINTED CIRCUIT BOARD, SW-467P |
| 817 | 1-643-015-12 | o PRINTED CIRCUIT BOARD, DC-57P  |
| 818 | 1-692-077-11 | s SWITCH, SLIDE                  |
| 819 | 1-696-147-11 | s CORE, FLAT TYPE (26 CORE)      |
| 820 | 2-269-962-00 | s COVER, SWITCH                  |
| 821 | 2-371-561-00 | s BUSHING (P), INSULATING        |
| 822 | 3-334-236-01 | s INSULATOR, TO-220              |
| 823 | 3-688-814-01 | s CAP, SWITCH                    |
| 825 | 3-738-923-01 | o HOLDER, LED                    |
| 826 | 3-947-117-01 | s KNOB, VOL                      |
| 827 | 3-947-125-01 | o BRACKET, AA                    |
| 828 | 3-947-131-01 | o BRACKET, LP                    |
| 829 | 3-947-132-01 | o BRACKET, SW G REG              |
| 830 | 3-947-144-01 | o BRACKET, SST                   |
| 831 | 4-818-403-00 | s RIVET, NYLON                   |
| 832 | 4-912-181-11 | o SUPPORT, PC                    |

Ornamental Panel Block

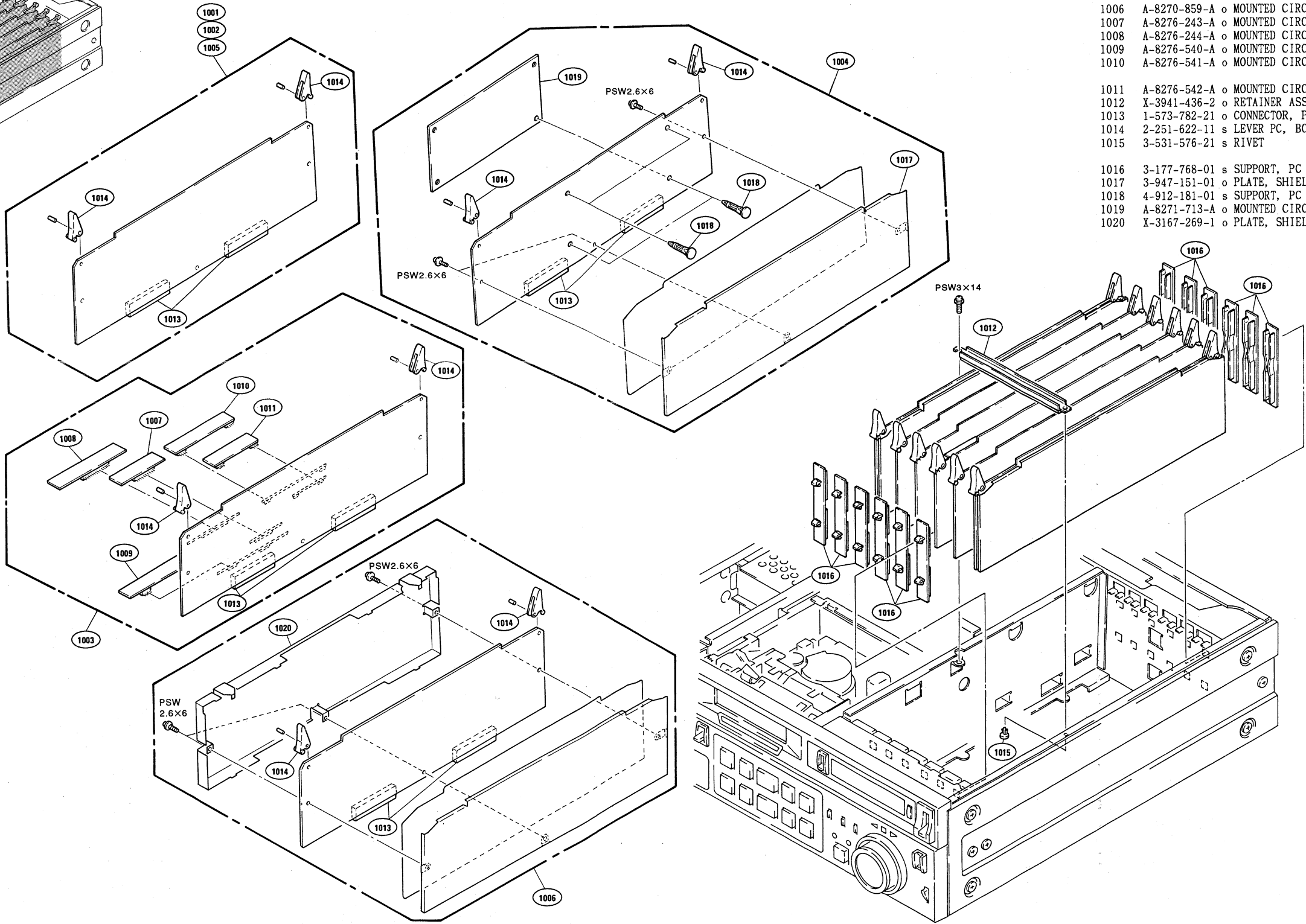
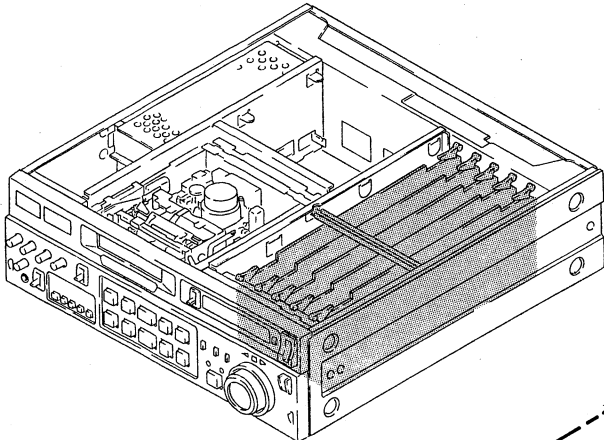


| No. | Part No.     | SP Description                  |
|-----|--------------|---------------------------------|
| 901 | A-8262-334-A | o PANEL BLOCK ASSY, KEY         |
| 902 | X-3668-075-0 | s KNOB ASSY, CONTROL            |
| 903 | X-3738-905-1 | o WINDOW ASSY                   |
| 904 | X-3166-960-1 | o PANEL ASSY (P), FRONT?        |
| 905 | 2-251-642-00 | s GUARD, POWER SWITCH           |
| 906 | 2-284-744-00 | o CUSHION (B), KEY              |
| 907 | 3-648-149-41 | o COVER (DIA.4), LAMP           |
| 908 | 3-668-008-02 | s PUSH BUTTON (3x5)             |
| 909 | 3-668-012-03 | s RUBBER, DIAL KNOB             |
| 910 | 3-672-782-02 | s KEY TOP (A)                   |
| 911 | 3-672-782-11 | s KEY TOP (A)                   |
| 912 | 3-672-783-02 | s KEY TOP (B)                   |
| 913 | 3-672-783-12 | s KEY TOP (B)                   |
| 914 | 3-672-783-32 | s KEY TOP (B)                   |
| 915 | 3-672-783-42 | s KEY TOP (B)                   |
| 916 | 3-672-783-52 | s KEY TOP (B)                   |
| 918 | 3-703-080-31 | s LABEL (TOP), SUB CAUTION      |
| 919 | 3-717-370-01 | o KNOB, DIAL                    |
| 920 | 3-717-374-01 | o FRAME (23x12), ORNAMENTAL, SW |
| 921 | 3-717-375-01 | o FRAME (18x12), ORNAMENTAL, SW |
| 922 | 3-717-557-01 | o PLATE, KNOB                   |
| 923 | 3-717-613-01 | o PLATE, ORNAMENTAL, LSW        |
| 924 | 3-721-101-73 | o DOOR                          |
| 925 | 3-733-602-01 | s KEY TOP (S)                   |
| 926 | 3-733-603-01 | s KEY TOP                       |
| 927 | 3-733-604-01 | s KEY TOP (PC)                  |
| 928 | 3-733-605-01 | s COVER, LED                    |
| 929 | 3-733-606-01 | s PUSH BUTTON (5x9)             |
| 930 | 3-733-690-01 | s +B4x6 (CU, NI)                |
| 931 | 3-738-907-01 | s FRAME, ORNAMENTAL, LEVER SW   |
| 932 | 3-738-912-01 | s PIN (9), PUSH BUTTON          |
| 933 | 3-738-925-03 | o PLATE (LEFT), SIDE            |
| 934 | 3-738-926-03 | o PLATE (RIGHT), SIDE           |
| 935 | 3-947-146-01 | o PLATE, BOTTOM                 |
| 936 | 3-947-148-01 | o PLATE, TOP                    |
| 937 | 4-309-349-00 | s SPRING, COIL                  |
| 938 | 4-866-613-00 | s SPRING, COMPRESSION           |

CARD RACK BLOCK

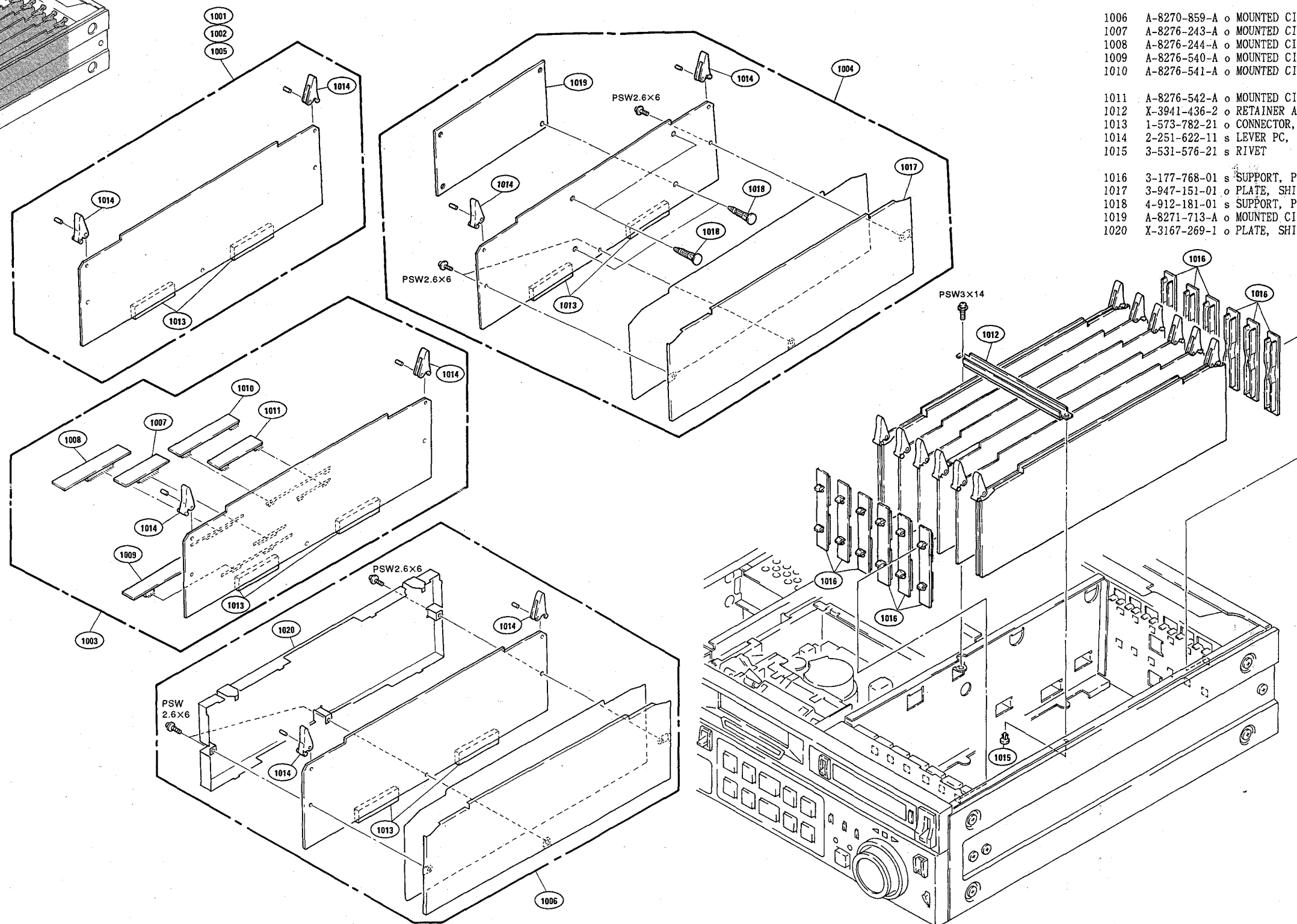
CARD RACK BLOCK

Card Rack Block



| No.  | Part No.     | SP Description                    |
|------|--------------|-----------------------------------|
| 1001 | A-8271-854-A | o MOUNTED CIRCUIT BOARD, AU-156AP |
| 1002 | A-8271-855-A | o MOUNTED CIRCUIT BOARD, MD-89    |
| 1003 | A-8271-856-A | o MOUNTED CIRCUIT BOARD, DM-92    |
| 1004 | A-8271-860-A | o MOUNTED CIRCUIT BOARD, AU-157AP |
| 1005 | A-8271-861-A | o MOUNTED CIRCUIT BOARD, VA-111AP |
| 1006 | A-8270-859-A | o MOUNTED CIRCUIT BOARD, TBC-27   |
| 1007 | A-8276-243-A | o MOUNTED CIRCUIT BOARD, CR-40    |
| 1008 | A-8276-244-A | o MOUNTED CIRCUIT BOARD, CR-41    |
| 1009 | A-8276-540-A | o MOUNTED CIRCUIT BOARD, FL-129P  |
| 1010 | A-8276-541-A | o MOUNTED CIRCUIT BOARD, FL-130P  |
| 1011 | A-8276-542-A | o MOUNTED CIRCUIT BOARD, FL-131P  |
| 1012 | X-3941-436-2 | o RETAINER ASSY, PCB              |
| 1013 | 1-573-782-21 | o CONNECTOR, PC BOARD (PLUG) 60P  |
| 1014 | 2-251-622-11 | s LEVER PC, BOARD                 |
| 1015 | 3-531-576-21 | s RIVET                           |
| 1016 | 3-177-768-01 | s SUPPORT, PC BOARD               |
| 1017 | 3-947-151-01 | o PLATE, SHIELD, CARD             |
| 1018 | 4-912-181-01 | s SUPPORT, PC                     |
| 1019 | A-8271-713-A | o MOUNTED CIRCUIT BOARD, PD-62    |
| 1020 | X-3167-269-1 | o PLATE, SHIELD ASSY, TBC         |

**CARD RACK BLOCK**



| No.  | Part No.     | SP Description                    |
|------|--------------|-----------------------------------|
| 1001 | A-8271-854-A | o MOUNTED CIRCUIT BOARD, AU-156AP |
| 1002 | A-8271-855-A | o MOUNTED CIRCUIT BOARD, MD-89    |
| 1003 | A-8271-856-A | o MOUNTED CIRCUIT BOARD, DM-92    |
| 1004 | A-8271-860-A | o MOUNTED CIRCUIT BOARD, AU-157AP |
| 1005 | A-8271-861-A | o MOUNTED CIRCUIT BOARD, VA-111AP |
| 1006 | A-8270-859-A | o MOUNTED CIRCUIT BOARD, TBC-27   |
| 1007 | A-8276-243-A | o MOUNTED CIRCUIT BOARD, CR-40    |
| 1008 | A-8276-244-A | o MOUNTED CIRCUIT BOARD, CR-41    |
| 1009 | A-8276-540-A | o MOUNTED CIRCUIT BOARD, FL-129P  |
| 1010 | A-8276-541-A | o MOUNTED CIRCUIT BOARD, FL-130P  |
| 1011 | A-8276-542-A | o MOUNTED CIRCUIT BOARD, FL-131P  |
| 1012 | X-3941-436-2 | o RETAINER ASSY, PCB              |
| 1013 | 1-573-782-21 | o CONNECTOR, PC BOARD (PLUG) 60P  |
| 1014 | 2-251-622-11 | s LEVER PC, BOARD                 |
| 1015 | 3-531-576-21 | s RIVET                           |
| 1016 | 3-177-768-01 | s SUPPORT, PC BOARD               |
| 1017 | 3-947-151-01 | o PLATE, SHIELD, CARD             |
| 1018 | 4-912-181-01 | s SUPPORT, PC                     |
| 1019 | A-8271-713-A | o MOUNTED CIRCUIT BOARD, PD-62    |
| 1020 | X-3167-269-1 | o PLATE, SHIELD ASSY, TBC         |

# 14-3. ELECTRICAL PARTS LIST

## AA-57P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8271-902-A | o MOUNTED CIRCUIT BOARD, AA-57P |
| 1pc                 | 3-947-125-01 | o BRACKET, AA                   |
| 2pcs                | 7-682-903-01 | s SCREW +PWH 3x5                |
| C1                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C2                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C3                  | 1-124-360-00 | s ELECT 1000uF 20% 16V          |
| C4                  | 1-124-360-00 | s ELECT 1000uF 20% 16V          |
| C5                  | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C6                  | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C7                  | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C8                  | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C9                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C51                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C52                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C53                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C54                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C55                 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C56                 | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C57                 | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C58                 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C59                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C101                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C102                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C103                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C104                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C105                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C201                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C202                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C203                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C204                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C205                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C301                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C303                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C304                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C305                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C306                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C401                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C403                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C404                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C405                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C406                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C501                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C601                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C701                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C801                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| CN201               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN202               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN203               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN204               | 1-564-002-41 | s CONNECTOR, 3P, MALE           |
| CN205               | 1-506-474-11 | s CONNECTOR, 9P, MALE           |
| CN206               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN207               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN208               | 1-564-009-11 | o CONNECTOR, 10P, MALE          |
| CN209               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN210               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| D101                | 8-719-106-35 | s DIODE RD8.2M-B2               |
| D102                | 8-719-106-35 | s DIODE RD8.2M-B2               |
| D103                | 8-719-106-35 | s DIODE RD8.2M-B2               |

## (AA-57P BOARD)

| Ref. No.<br>or Q'ty | Part No.      | SP Description              |
|---------------------|---------------|-----------------------------|
| D104                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D201                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D202                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D203                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D204                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D301                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D302                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D303                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D304                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D401                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D402                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D403                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D404                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D501                | 8-719-800-76  | s DIODE 1SS226              |
| D601                | 8-719-800-76  | s DIODE 1SS226              |
| D701                | 8-719-800-76  | s DIODE 1SS226              |
| D801                | 8-719-800-76  | s DIODE 1SS226              |
| IC101               | 8-759-106-02  | s IC UPC4570G2              |
| IC102               | 8-759-106-02  | s IC UPC4570G2              |
| IC103               | 8-759-300-71  | s IC HD14053BFP             |
| IC201               | 8-759-106-02  | s IC UPC4570G2              |
| IC202               | 8-759-106-02  | s IC UPC4570G2              |
| IC203               | 8-759-300-71  | s IC HD14053BFP             |
| IC301               | 8-759-106-02  | s IC UPC4570G2              |
| IC302               | 8-759-106-02  | s IC UPC4570G2              |
| IC401               | 8-759-106-02  | s IC UPC4570G2              |
| IC402               | 8-759-106-02  | s IC UPC4570G2              |
| IC601               | 8-759-745-64  | s IC NJM4560M               |
| IC801               | 8-759-745-64  | s IC NJM4560M               |
| PS1                 | ▲1-532-605-00 | s LINK, IC 0.4A             |
| PS2                 | ▲1-532-605-00 | s LINK, IC 0.4A             |
| Q1                  | 8-729-807-16  | s TRANSISTOR 2SD1621        |
| Q2                  | 8-729-805-25  | s TRANSISTOR 2SB1121-S      |
| Q51                 | 8-729-807-16  | s TRANSISTOR 2SD1621        |
| Q52                 | 8-729-805-25  | s TRANSISTOR 2SB1121-S      |
| Q501                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q502                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q503                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q601                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q602                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q603                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q701                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q702                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q703                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q801                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q802                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q803                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| R1                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R2                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R3                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R4                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R5                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R6                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R7                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R8                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R9                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R10                 | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |



## (AA-57P BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description            |
|---------------------|----------------|---------------------------|
| R709                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R710                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R711                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R712                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R713                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R714                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R715                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R716                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R717                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R718                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R719                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R720                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R721                | 1-216-821-11 s | METAL, CHIP 1K 5% 1/16W   |
| R801                | 1-216-821-11 s | METAL, CHIP 1K 5% 1/16W   |
| R802                | 1-216-830-11 s | METAL, CHIP 5.6K 5% 1/16W |
| R803                | 1-216-833-11 s | METAL, CHIP 10K 5% 1/16W  |
| R804                | 1-216-865-11 s | METAL, CHIP 3K 5% 1/16W   |
| R805                | 1-216-797-11 s | METAL, CHIP 10 5% 1/16W   |
| R806                | 1-216-821-11 s | METAL, CHIP 1K 5% 1/16W   |
| R807                | 1-216-821-11 s | METAL, CHIP 1K 5% 1/16W   |
| R808                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R809                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R810                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R811                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R812                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R813                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R814                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R815                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R816                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R817                | 1-216-798-11 s | METAL, CHIP 12 5% 1/16W   |
| R818                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R819                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R820                | 1-216-799-11 s | METAL, CHIP 15 5% 1/16W   |
| R821                | 1-216-821-11 s | METAL, CHIP 1K 5% 1/16W   |
| T501                | 1-427-586-11 s | TRANSFORMER, INPUT/OUTPUT |
| T601                | 1-427-586-11 s | TRANSFORMER, INPUT/OUTPUT |
| T701                | 1-427-586-11 s | TRANSFORMER, INPUT/OUTPUT |
| T801                | 1-427-586-11 s | TRANSFORMER, INPUT/OUTPUT |

## AC-121AP BOARD

| Ref. No.<br>or Q'ty | Part No.       | SP Description                 |
|---------------------|----------------|--------------------------------|
| 1pc                 | 1-576-228-11 s | FUSE, H.B.C. 2A 250V           |
| 1pc                 | 1-643-013-21 o | PRINTED CIRCUIT BOARD, AC-121A |
| 1pc                 | 4-601-472-00 o | COVER, FUSE                    |
| CN911               | 1-565-395-11 o | CONNECTOR, VH 3P, MALE         |
| CN912               | 1-564-321-00 o | CONNECTOR, 2P, MALE            |
| F1                  | 1-533-189-11 s | HOLDER, FUSE                   |
| F2                  | 1-533-189-11 s | HOLDER, FUSE                   |

## AU-156AP BOARD

| Ref. No.<br>or Q'ty | Part No.       | SP Description                  |
|---------------------|----------------|---------------------------------|
| 1pc                 | A-8271-854-A o | MOUNTED CIRCUIT BOARD, AU-156AP |
| 2pcs                | 2-251-622-11 s | LEVER, PC BOARD                 |
| C1                  | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C2                  | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C3                  | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C4                  | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C5                  | 1-162-921-11 s | CERAMIC, CHIP 33PF 5% 50V       |
| C6                  | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C7                  | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C8                  | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C9                  | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C10                 | 1-126-963-11 s | ELECT 4.7uF 20% 50V             |
| C50                 | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V       |
| C51                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C52                 | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C53                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C54                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C55                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C56                 | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C57                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C58                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C59                 | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C60                 | 1-162-919-11 s | CERAMIC, CHIP 22PF 5% 50V       |
| C61                 | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C64                 | 1-126-963-11 s | ELECT 4.7uF 20% 50V             |
| C65                 | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C101                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C102                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C103                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C104                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C105                | 1-162-921-11 s | CERAMIC, CHIP 33PF 5% 50V       |
| C106                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C107                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C108                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C109                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C110                | 1-126-963-11 s | ELECT 4.7uF 20% 50V             |
| C150                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V       |
| C152                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C153                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C154                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C155                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C156                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C157                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C160                | 1-162-919-11 s | CERAMIC, CHIP 22PF 5% 50V       |
| C164                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C201                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C202                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C203                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C204                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C205                | 1-162-921-11 s | CERAMIC, CHIP 33PF 5% 50V       |
| C206                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C207                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C208                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C209                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C250                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V       |
| C252                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C254                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C255                | 1-164-227-11 s | CERAMIC, CHIP 0.022uF 10% 25V   |

## 14-3. ELECTRICAL PARTS LIST

### AA-57P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8271-902-A | o MOUNTED CIRCUIT BOARD, AA-57P |
| 1pc                 | 3-947-125-01 | o BRACKET, AA                   |
| 2pcs                | 7-682-903-01 | s SCREW +PWH 3x5                |
| C1                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C2                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C3                  | 1-124-360-00 | s ELECT 1000uF 20% 16V          |
| C4                  | 1-124-360-00 | s ELECT 1000uF 20% 16V          |
| C5                  | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C6                  | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C7                  | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C8                  | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C9                  | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C51                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C52                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C53                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C54                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C55                 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C56                 | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C57                 | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C58                 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C59                 | 1-124-119-00 | s ELECT 330uF 20% 16V           |
| C101                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C102                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C103                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C104                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C105                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C201                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C202                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C203                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C204                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C205                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C301                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C303                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C304                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C305                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C306                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C401                | 1-162-964-11 | s CERAMIC, CHIP 0.001uF 10% 50V |
| C403                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C404                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C405                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C406                | 1-124-910-11 | s ELECT 47uF 20% 50V            |
| C501                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C601                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C701                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C801                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| CN201               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN202               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN203               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| CN204               | 1-564-002-41 | s CONNECTOR, 3P, MALE           |
| CN205               | 1-506-474-11 | s CONNECTOR, 9P, MALE           |
| CN206               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN207               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN208               | 1-564-009-11 | o CONNECTOR, 10P, MALE          |
| CN209               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| CN210               | 1-506-469-11 | s CONNECTOR, 4P, MALE           |
| D101                | 8-719-106-35 | s DIODE RD8.2M-B2               |
| D102                | 8-719-106-35 | s DIODE RD8.2M-B2               |
| D103                | 8-719-106-35 | s DIODE RD8.2M-B2               |

### (AA-57P BOARD)

| Ref. No.<br>or Q'ty | Part No.      | SP Description              |
|---------------------|---------------|-----------------------------|
| D104                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D201                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D202                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D203                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D204                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D301                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D302                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D303                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D304                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D401                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D402                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D403                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D404                | 8-719-106-35  | s DIODE RD8.2M-B2           |
| D501                | 8-719-800-76  | s DIODE 1SS226              |
| D601                | 8-719-800-76  | s DIODE 1SS226              |
| D701                | 8-719-800-76  | s DIODE 1SS226              |
| D801                | 8-719-800-76  | s DIODE 1SS226              |
| IC101               | 8-759-106-02  | s IC UPC4570G2              |
| IC102               | 8-759-106-02  | s IC UPC4570G2              |
| IC103               | 8-759-300-71  | s IC HD14053BFP             |
| IC201               | 8-759-106-02  | s IC UPC4570G2              |
| IC202               | 8-759-106-02  | s IC UPC4570G2              |
| IC203               | 8-759-300-71  | s IC HD14053BFP             |
| IC301               | 8-759-106-02  | s IC UPC4570G2              |
| IC302               | 8-759-106-02  | s IC UPC4570G2              |
| IC401               | 8-759-106-02  | s IC UPC4570G2              |
| IC402               | 8-759-106-02  | s IC UPC4570G2              |
| IC601               | 8-759-745-64  | s IC NJM4560M               |
| IC801               | 8-759-745-64  | s IC NJM4560M               |
| PS1                 | ▲1-532-605-00 | s LINK, IC 0.4A             |
| PS2                 | ▲1-532-605-00 | s LINK, IC 0.4A             |
| Q1                  | 8-729-807-16  | s TRANSISTOR 2SD1621        |
| Q2                  | 8-729-805-25  | s TRANSISTOR 2SB1121-S      |
| Q51                 | 8-729-807-16  | s TRANSISTOR 2SD1621        |
| Q52                 | 8-729-805-25  | s TRANSISTOR 2SB1121-S      |
| Q501                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q502                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q503                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q601                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q602                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q603                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q701                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q702                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q703                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| Q801                | 8-729-301-57  | s TRANSISTOR 2SB841         |
| Q802                | 8-729-301-60  | s TRANSISTOR 2SD1081        |
| Q803                | 8-729-202-38  | s TRANSISTOR 2SC3326N       |
| R1                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R2                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R3                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R4                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R5                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R6                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R7                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R8                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R9                  | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |
| R10                 | 1-216-824-11  | s METAL, CHIP 1.8K 5% 1/16W |

| Ref. No.<br>or Q'ty | Part No. | SP Description |
|---------------------|----------|----------------|
|---------------------|----------|----------------|

|      |              |   |             |      |       |       |
|------|--------------|---|-------------|------|-------|-------|
| R51  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
| R52  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
| R53  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
| R54  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
| R55  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
|      |              |   |             |      |       |       |
| R56  | 1-216-824-11 | s | METAL, CHIP | 1.8K | 5%    | 1/16W |
| R102 | 1-216-833-11 | s | METAL, CHIP | 10K  | 5%    | 1/16W |
| R104 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
| R105 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
| R106 | 1-218-675-11 | s | METAL, CHIP | 200  | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R110 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R111 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R112 | 1-216-816-11 | s | METAL, CHIP | 390  | 5%    | 1/16W |
| R113 | 1-218-727-11 | s | METAL, CHIP | 30K  | 0.50% | 1/16W |
| R114 | 1-218-670-11 | s | METAL, CHIP | 120  | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R115 | 1-218-723-11 | s | METAL, CHIP | 20K  | 0.50% | 1/16W |
| R116 | 1-218-723-11 | s | METAL, CHIP | 20K  | 0.50% | 1/16W |
| R117 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R118 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R119 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R120 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R121 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R202 | 1-216-833-11 | s | METAL, CHIP | 10K  | 5%    | 1/16W |
| R204 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
| R205 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
|      |              |   |             |      |       |       |
| R206 | 1-218-675-11 | s | METAL, CHIP | 200  | 0.50% | 1/16W |
| R210 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R211 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R212 | 1-216-816-11 | s | METAL, CHIP | 390  | 5%    | 1/16W |
| R213 | 1-218-727-11 | s | METAL, CHIP | 30K  | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R214 | 1-218-670-11 | s | METAL, CHIP | 120  | 0.50% | 1/16W |
| R215 | 1-218-723-11 | s | METAL, CHIP | 20K  | 0.50% | 1/16W |
| R216 | 1-218-723-11 | s | METAL, CHIP | 20K  | 0.50% | 1/16W |
| R217 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R218 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R219 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R220 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R221 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R301 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
| R302 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
|      |              |   |             |      |       |       |
| R303 | 1-218-675-11 | s | METAL, CHIP | 200  | 0.50% | 1/16W |
| R307 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R308 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R309 | 1-216-804-11 | s | METAL, CHIP | 39   | 5%    | 1/16W |
| R310 | 1-216-865-11 | s | METAL, CHIP | 3K   | 5%    | 1/16W |
|      |              |   |             |      |       |       |
| R311 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R312 | 1-218-271-11 | s | METAL, CHIP | 2K   | 5%    | 1/16W |
| R313 | 1-218-271-11 | s | METAL, CHIP | 2K   | 5%    | 1/16W |
| R314 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R315 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
|      |              |   |             |      |       |       |
| R316 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R317 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R321 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R401 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
| R402 | 1-218-272-11 | s | METAL, CHIP | 5.1K | 5%    | 1/16W |
|      |              |   |             |      |       |       |
| R403 | 1-218-675-11 | s | METAL, CHIP | 200  | 0.50% | 1/16W |
| R407 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R408 | 1-218-740-11 | s | METAL, CHIP | 100K | 0.50% | 1/16W |
| R409 | 1-216-804-11 | s | METAL, CHIP | 39   | 5%    | 1/16W |

[illegible]

|      |              |   |             |      |       |       |
|------|--------------|---|-------------|------|-------|-------|
| R410 | 1-216-865-11 | s | METAL, CHIP | 3K   | 5%    | 1/16W |
| R411 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R412 | 1-218-271-11 | s | METAL, CHIP | 2K   | 5%    | 1/16W |
| R413 | 1-218-271-11 | s | METAL, CHIP | 2K   | 5%    | 1/16W |
| R414 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R415 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R416 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R417 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R421 | 1-218-708-11 | s | METAL, CHIP | 4.7K | 0.50% | 1/16W |
| R501 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R502 | 1-216-830-11 | s | METAL, CHIP | 5.6K | 5%    | 1/16W |
| R503 | 1-216-833-11 | s | METAL, CHIP | 10K  | 5%    | 1/16W |
| R504 | 1-216-865-11 | s | METAL, CHIP | 3K   | 5%    | 1/16W |
| R505 | 1-216-797-11 | s | METAL, CHIP | 10   | 5%    | 1/16W |
| R506 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R507 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R508 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R509 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R510 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R511 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R512 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R513 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R514 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R515 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R516 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R517 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R518 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R519 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R520 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R521 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R601 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R602 | 1-216-830-11 | s | METAL, CHIP | 5.6K | 5%    | 1/16W |
| R603 | 1-216-833-11 | s | METAL, CHIP | 10K  | 5%    | 1/16W |
| R604 | 1-216-865-11 | s | METAL, CHIP | 3K   | 5%    | 1/16W |
| R605 | 1-216-797-11 | s | METAL, CHIP | 10   | 5%    | 1/16W |
| R606 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R607 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R608 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R609 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R610 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R611 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R612 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R613 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R614 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R615 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R616 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R617 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |
| R618 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R619 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R620 | 1-216-799-11 | s | METAL, CHIP | 15   | 5%    | 1/16W |
| R621 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R701 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R702 | 1-216-830-11 | s | METAL, CHIP | 5.6K | 5%    | 1/16W |
| R703 | 1-216-833-11 | s | METAL, CHIP | 10K  | 5%    | 1/16W |
| R704 | 1-216-865-11 | s | METAL, CHIP | 3K   | 5%    | 1/16W |
| R705 | 1-216-797-11 | s | METAL, CHIP | 10   | 5%    | 1/16W |
| R706 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R707 | 1-216-821-11 | s | METAL, CHIP | 1K   | 5%    | 1/16W |
| R708 | 1-216-798-11 | s | METAL, CHIP | 12   | 5%    | 1/16W |

## (AA-57P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R709                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R710                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R711                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R712                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R713                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R714                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R715                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R716                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R717                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R718                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R719                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R720                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R721                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R801                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R802                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R803                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R804                | 1-216-865-11 | s METAL, CHIP 3K 5% 1/16W   |
| R805                | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W   |
| R806                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R807                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R808                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R809                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R810                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R811                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R812                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R813                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R814                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R815                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R816                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R817                | 1-216-798-11 | s METAL, CHIP 12 5% 1/16W   |
| R818                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R819                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R820                | 1-216-799-11 | s METAL, CHIP 15 5% 1/16W   |
| R821                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| T501                | 1-427-586-11 | s TRANSFORMER, INPUT/OUTPUT |
| T601                | 1-427-586-11 | s TRANSFORMER, INPUT/OUTPUT |
| T701                | 1-427-586-11 | s TRANSFORMER, INPUT/OUTPUT |
| T801                | 1-427-586-11 | s TRANSFORMER, INPUT/OUTPUT |

## AC-121AP BOARD

| Ref. No.<br>or Q'ty | Part No.      | SP Description                   |
|---------------------|---------------|----------------------------------|
| 1pc                 | ▲1-576-228-11 | s FUSE, H.B.C. 2A 250V           |
| 1pc                 | 1-643-013-21  | o PRINTED CIRCUIT BOARD, AC-121A |
| 1pc                 | 4-601-472-00  | o COVER, FUSE                    |
| CN911               | ▲1-565-395-11 | o CONNECTOR, VH 3P, MALE         |
| CN912               | ▲1-564-321-00 | o CONNECTOR, 2P, MALE            |
| F1                  | 1-533-189-11  | s HOLDER, FUSE                   |
| F2                  | 1-533-189-11  | s HOLDER, FUSE                   |

## AU-156AP BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                    |
|---------------------|--------------|-----------------------------------|
| 1pc                 | A-8271-854-A | o MOUNTED CIRCUIT BOARD, AU-156AP |
| 2pcs                | 2-251-622-11 | s LEVER, PC BOARD                 |
| C1                  | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C2                  | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C3                  | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C4                  | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C5                  | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V       |
| C6                  | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C7                  | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C8                  | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C9                  | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C10                 | 1-126-963-11 | s ELECT 4.7uF 20% 50V             |
| C50                 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C51                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C52                 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C53                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C54                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C55                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C56                 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C57                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C58                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C59                 | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C60                 | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V       |
| C61                 | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C64                 | 1-126-963-11 | s ELECT 4.7uF 20% 50V             |
| C65                 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C101                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C102                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C103                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C104                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C105                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V       |
| C106                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C107                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C108                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C109                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C110                | 1-126-963-11 | s ELECT 4.7uF 20% 50V             |
| C150                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C152                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C153                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C154                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C155                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C156                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C157                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C160                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V       |
| C164                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C201                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C202                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C203                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C204                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C205                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V       |
| C206                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C207                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C208                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C209                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C250                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C252                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C254                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C255                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C260                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C261                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C262                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C263                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C264                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C301                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C302                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C303                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C304                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C305                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V      |
| C306                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C307                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C308                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C309                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C350                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C352                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C360                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C364                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C501                | 1-124-464-11 | s ELECT 0.22uF 20% 50V           |
| C502                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C503                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C504                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C505                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C506                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C507                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C508                | 1-164-373-11 | s CERAMIC, CHIP 0.033uF 25V      |
| C509                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C510                | 1-162-967-11 | s CERAMIC, CHIP 0.0033uF 10% 50V |
| C511                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C512                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C513                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C514                | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C515                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C517                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C518                | 1-162-969-11 | s CERAMIC, CHIP 0.0068uF 10% 25V |
| C519                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C520                | 1-162-965-11 | s CERAMIC, CHIP 0.0015uF 10% 50V |
| C521                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C523                | 1-162-966-11 | s CERAMIC, CHIP 0.0022uF 10% 50V |
| C524                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V    |
| C525                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V     |
| C526                | 1-135-210-11 | s TANTALUM, CHIP 4.7uF 20% 10V   |
| C527                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C528                | 1-124-902-00 | s ELECT 0.47uF 20% 50V           |
| C531                | 1-124-902-00 | s ELECT 0.47uF 20% 50V           |
| C601                | 1-124-464-11 | s ELECT 0.22uF 20% 50V           |
| C602                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C603                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C604                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C605                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C606                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C607                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C608                | 1-164-373-11 | s CERAMIC, CHIP 0.033uF 25V      |
| C609                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C610                | 1-162-967-11 | s CERAMIC, CHIP 0.0033uF 10% 50V |
| C611                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C613                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C614                | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C615                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C617                | 1-162-963-11 | s CERAMIC, CHIP 680PF 10% 50V    |
| C618                | 1-162-969-11 | s CERAMIC, CHIP 0.0068uF 10% 25V |
| C619                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C620                | 1-162-965-11 | s CERAMIC, CHIP 0.0015uF 10% 50V |
| C621                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C622                | 1-124-902-00 | s ELECT 0.47uF 20% 50V           |
| C623                | 1-162-966-11 | s CERAMIC, CHIP 0.0022uF 10% 50V |
| C624                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V    |
| C625                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V     |
| C626                | 1-135-210-11 | s TANTALUM, CHIP 4.7uF 20% 10V   |
| C627                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C628                | 1-124-902-00 | s ELECT 0.47uF 20% 50V           |
| C629                | 1-126-966-11 | s ELECT 33uF 20% 50V             |
| C630                | 1-135-210-11 | s TANTALUM, CHIP 4.7uF 20% 10V   |
| C631                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C701                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C702                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C703                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C704                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C705                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C706                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C707                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C708                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C709                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C710                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C711                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C712                | 1-164-346-11 | s CERAMIC 1uF 16V                |
| C713                | 1-162-926-11 | s CERAMIC, CHIP 82PF 5% 50V      |
| C714                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C715                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C716                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C717                | 1-124-925-11 | s ELECT 2.2uF 20% 100V           |
| C718                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C719                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C720                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C721                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C722                | 1-124-925-11 | s ELECT 2.2uF 20% 100V           |
| C723                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V      |
| C724                | 1-162-920-11 | s CERAMIC, CHIP 27PF 5% 50V      |
| C725                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C726                | 1-162-207-31 | s CERAMIC 22PF 5% 50V            |
| C727                | 1-162-965-11 | s CERAMIC, CHIP 0.0015uF 10% 50V |
| C728                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C730                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V     |
| C731                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V     |
| C732                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C733                | 1-124-464-11 | s ELECT 0.22uF 20% 50V           |
| C734                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C735                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C750                | 1-124-925-11 | s ELECT 2.2uF 20% 100V           |
| C801                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C802                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C803                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C804                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C805                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C806                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C851                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C852                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C860                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |

## (AU-156A BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C861                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C901                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C902                | 1-126-934-11 | s ELECT 220uF 20% 16V           |
| C951                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C952                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C953                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C954                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C955                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C956                | 1-126-934-11 | s ELECT 220uF 20% 16V           |
| C957                | 1-126-934-11 | s ELECT 220uF 20% 16V           |
| C1001               | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C1002               | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C1003               | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C1004               | 1-164-677-11 | s CERAMIC, CHIP 0.033uF 10% 16V |
| C1005               | 1-164-677-11 | s CERAMIC, CHIP 0.033uF 10% 16V |
| C1006               | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C1007               | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| CN221               | 1-506-488-11 | s CONNECTOR 9P, MALE            |
| CN222               | 1-506-489-11 | s CONNECTOR 10P, MALE           |
| CN603               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CN604               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| D1                  | 8-719-941-86 | s DIODE DAN202U                 |
| D2                  | 8-719-941-09 | s DIODE DAP202U                 |
| D50                 | 8-719-941-09 | s DIODE DAP202U                 |
| D51                 | 8-719-941-09 | s DIODE DAP202U                 |
| D52                 | 8-719-941-09 | s DIODE DAP202U                 |
| D53                 | 8-719-941-86 | s DIODE DAN202U                 |
| D54                 | 8-719-941-86 | s DIODE DAN202U                 |
| D55                 | 8-719-941-86 | s DIODE DAN202U                 |
| D101                | 8-719-941-86 | s DIODE DAN202U                 |
| D102                | 8-719-941-09 | s DIODE DAP202U                 |
| D150                | 8-719-941-09 | s DIODE DAP202U                 |
| D151                | 8-719-941-09 | s DIODE DAP202U                 |
| D153                | 8-719-941-09 | s DIODE DAP202U                 |
| D201                | 8-719-941-86 | s DIODE DAN202U                 |
| D202                | 8-719-941-09 | s DIODE DAP202U                 |
| D301                | 8-719-941-86 | s DIODE DAN202U                 |
| D302                | 8-719-941-09 | s DIODE DAP202U                 |
| D750                | 8-719-941-09 | s DIODE DAP202U                 |
| D751                | 8-719-941-09 | s DIODE DAP202U                 |
| D801                | 8-719-941-09 | s DIODE DAP202U                 |
| D802                | 8-719-941-86 | s DIODE DAN202U                 |
| D901                | 8-719-200-02 | s DIODE 10E2                    |
| D902                | 8-719-200-02 | s DIODE 10E2                    |
| D903                | 8-719-941-09 | s DIODE DAP202U                 |
| FL701               | 1-236-550-11 | s FILTER, BAND PASS 15MHz       |
| FL702               | 1-236-551-11 | s FILTER, BAND PASS 17MHz       |
| IC1                 | 8-759-603-27 | s IC M5201FP                    |
| IC2                 | 8-759-701-97 | s IC NJM4562M                   |
| IC50                | 8-759-701-97 | s IC NJM4562M                   |
| IC51                | 8-759-603-27 | s IC M5201FP                    |
| IC52                | 8-759-981-86 | s IC RC4556MA                   |
| IC53                | 8-759-009-06 | s IC MC14052BF                  |
| IC101               | 8-759-603-27 | s IC M5201FP                    |
| IC102               | 8-759-701-97 | s IC NJM4562M                   |
| IC150               | 8-759-701-97 | s IC NJM4562M                   |
| IC151               | 8-759-603-27 | s IC M5201FP                    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| IC201               | 8-759-603-27 | s IC M5201FP                |
| IC202               | 8-759-701-97 | s IC NJM4562M               |
| IC250               | 8-759-701-97 | s IC NJM4562M               |
| IC251               | 8-759-009-06 | s IC MC14052BF              |
| IC301               | 8-759-603-27 | s IC M5201FP                |
| IC302               | 8-759-701-97 | s IC NJM4562M               |
| IC401               | 8-759-009-03 | s IC MC14049UBF             |
| IC501               | 8-759-823-19 | s IC CXA1488R               |
| IC601               | 8-759-823-19 | s IC CXA1488R               |
| IC701               | 8-759-823-21 | s IC CXA1536Q               |
| IC702               | 8-759-927-46 | s IC SN74HC00NS             |
| IC703               | 8-759-925-74 | s IC TC74HC04NS             |
| IC704               | 8-759-925-72 | s IC SN74HC02NS             |
| IC705               | 8-759-708-05 | s IC NJM78L05A              |
| IC751               | 8-759-239-58 | s IC TC74HC221AF            |
| IC801               | 8-759-603-27 | s IC M5201FP                |
| IC851               | 8-759-603-27 | s IC M5201FP                |
| IC1001              | 8-759-923-63 | s IC TL592PS                |
| IC1002              | 8-759-700-43 | s IC NJM4558M               |
| L860                | 1-412-533-21 | s INDUCTOR, 47uH            |
| L900                | 1-412-533-21 | s INDUCTOR, 47uH            |
| L950                | 1-412-533-21 | s INDUCTOR, 47uH            |
| L952                | 1-408-785-21 | s INDUCTOR CHIP 47uH        |
| Q1                  | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q2                  | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q3                  | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q50                 | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q51                 | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q54                 | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q101                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q102                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q103                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q150                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q151                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q154                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q155                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q201                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q202                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q203                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q250                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q251                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q255                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q256                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q257                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q301                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q302                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q303                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q350                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q351                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q602                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q701                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q702                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q703                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q704                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q705                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q706                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q707                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q708                | 8-729-117-32 | s TRANSISTOR 2SC4177        |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| Q709                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q710                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q750                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q751                | 8-729-117-16 | s TRANSISTOR 2SA1611-M6     |
| Q752                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q753                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q754                | 8-729-117-16 | s TRANSISTOR 2SA1611-M6     |
| Q755                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q756                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q801                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q802                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q851                | 8-729-209-11 | s TRANSISTOR 2SC4213A-TE85L |
| Q852                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q860                | 8-729-117-32 | s TRANSISTOR 2SC4177        |
| Q901                | 8-729-117-16 | s TRANSISTOR 2SA1611-M6     |
| Q902                | 8-729-117-16 | s TRANSISTOR 2SA1611-M6     |
| Q911                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG     |
| Q912                | 8-729-216-22 | s TRANSISTOR 2SA1162        |
| Q1001               | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6   |
| Q1002               | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6   |
| Q1003               | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6   |
| R1                  | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R2                  | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R3                  | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R4                  | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R5                  | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W   |
| R6                  | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W |
| R7                  | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R8                  | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R9                  | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R10                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R11                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R12                 | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W  |
| R13                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R15                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R50                 | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R51                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R52                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R53                 | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R54                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R55                 | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W |
| R57                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W  |
| R58                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R59                 | 1-218-345-11 | s METAL, CHIP 9.1K 5% 1/16W |
| R60                 | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W |
| R61                 | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W   |
| R62                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R100                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R103                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R104                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R105                | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W   |
| R106                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W |
| R107                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R108                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R109                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R110                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R111                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R112                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W  |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R113                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R115                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R116                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R150                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R151                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R152                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R153                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R154                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R155                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R157                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R158                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R159                | 1-218-345-11 | s METAL, CHIP 9.1K 5% 1/16W   |
| R160                | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W   |
| R161                | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W     |
| R162                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R163                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R164                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R165                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R200                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R201                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R202                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R203                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R204                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R205                | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W     |
| R206                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W   |
| R207                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R208                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R209                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R210                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R211                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R212                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W    |
| R213                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R250                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R251                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R252                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R253                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W   |
| R254                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R255                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R257                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R266                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R267                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R268                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R269                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R270                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R271                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R272                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R274                | 1-220-373-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R275                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R276                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R277                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R303                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R304                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R305                | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W     |
| R306                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W   |
| R307                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R308                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R309                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R310                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R311                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |



## (AU-156A BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R312                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W    |
| R313                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R316                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R350                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R351                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R352                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R353                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R354                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R355                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R357                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R401                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R402                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R403                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R404                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R405                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R406                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R412                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R413                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R414                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R415                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R501                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R503                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R504                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R505                | 1-218-724-11 | s METAL, CHIP 22K 0.50% 1/16W |
| R506                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W     |
| R507                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R508                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R510                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R511                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R513                | 1-218-716-11 | s METAL, CHIP 10K 0.50% 1/16W |
| R514                | 1-218-883-11 | s METAL, CHIP 33K 0.50 1/16W  |
| R515                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R516                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R517                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R518                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R519                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R520                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R521                | 1-218-732-11 | s METAL, CHIP 47K 0.50% 1/16W |
| R522                | 1-218-732-11 | s METAL, CHIP 47K 0.50% 1/16W |
| R523                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R524                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W   |
| R550                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R601                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R603                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R604                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R605                | 1-218-724-11 | s METAL, CHIP 22K 0.50% 1/16W |
| R606                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W     |
| R607                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R608                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R610                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R611                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R613                | 1-218-716-11 | s METAL, CHIP 10K 0.50% 1/16W |
| R614                | 1-218-883-11 | s METAL, CHIP 33K 0.50 1/16W  |
| R615                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R616                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R617                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R620                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R621                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R622                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |

## (AU-156A BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R623                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R624                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W    |
| R650                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R653                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W       |
| R701                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R702                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R703                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R704                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R705                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R706                | 1-218-698-11 | s METAL, CHIP 1.8K 0.50% 1/16W |
| R707                | 1-218-698-11 | s METAL, CHIP 1.8K 0.50% 1/16W |
| R708                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W     |
| R709                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W     |
| R710                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R711                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R712                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R713                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R714                | 1-218-313-11 | s METAL, CHIP 560 1% 1/16W     |
| R715                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R716                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R717                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R718                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R719                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R720                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R721                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R722                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R723                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R724                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R725                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R727                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R728                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W      |
| R729                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R732                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R733                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R734                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R735                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R736                | 1-218-732-11 | s METAL, CHIP 47K 0.50% 1/16W  |
| R737                | 1-218-732-11 | s METAL, CHIP 47K 0.50% 1/16W  |
| R744                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W       |
| R745                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W       |
| R746                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R750                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W    |
| R751                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R752                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R753                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R754                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R755                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W     |
| R756                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W     |
| R757                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R758                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R759                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R760                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W     |
| R761                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W     |
| R762                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R763                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W       |
| R764                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R800                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R801                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R802                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R803                | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W   |
| R804                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R805                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R806                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R807                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R808                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R809                | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W  |
| R850                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R851                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R852                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R853                | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W   |
| R854                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R855                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R856                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R857                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R858                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R859                | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W  |
| R860                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R861                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R862                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R901                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R902                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W  |
| R903                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R904                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R905                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R906                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R927                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R928                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R1001               | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R1002               | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R1003               | 1-216-824-11 | s METAL, CHIP 2.4K 5% 1/16W |
| R1004               | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R1005               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1006               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1007               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1008               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1009               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1010               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R1011               | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| RV1                 | 1-238-804-11 | s RES, ADJ METAL 50K        |
| RV51                | 1-238-788-11 | s RES, ADJ METAL 20K        |
| RV101               | 1-238-804-11 | s RES, ADJ METAL 50K        |
| RV151               | 1-238-788-11 | s RES, ADJ METAL 20K        |
| RV201               | 1-238-804-11 | s RES, ADJ METAL 50K        |
| RV251               | 1-238-788-11 | s RES, ADJ METAL 20K        |
| RV301               | 1-238-804-11 | s RES, ADJ METAL 50K        |
| RV351               | 1-238-788-11 | s RES, ADJ METAL 20K        |
| RV501               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV502               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV503               | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV601               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV602               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV603               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV701               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV702               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV750               | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV751               | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV801               | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV851               | 1-238-784-11 | s RES, ADJ METAL 1K         |

## (AU-156AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description        |
|---------------------|--------------|-----------------------|
| RV1001              | 1-238-800-11 | s RES, ADJ METAL 2K   |
| S1                  | 1-570-134-11 | s SWITCH, SLIDE       |
| X501                | 1-577-117-21 | s CRYSTAL 4.433619MHz |

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 AU-157AP BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                    |
|---------------------|--------------|-----------------------------------|
| 1pc                 | A-8271-860-A | o MOUNTED CIRCUIT BOARD, AU-157AP |
| 1pc                 | 3-947-151-01 | o PLATE, SHIELD, CARD             |
| 1pc                 | 4-912-181-01 | s SUPPORT, PC                     |
| 1pc                 | 7-621-759-45 | s SCREW +PSW 2.6x6                |
| 2pcs                | 2-251-622-11 | s LEVER, PC BOARD                 |
| C401                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C402                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C403                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C404                | 1-162-587-11 | s CERAMIC, CHIP 0.039uF 10% 25V   |
| C405                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V      |
| C406                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C407                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V  |
| C408                | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V       |
| C409                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C410                | 1-163-020-00 | s CERAMIC, CHIP 0.0082uF 10% 50V  |
| C411                | 1-135-149-21 | s TANTALUM, CHIP 2.2uF 10% 10V    |
| C412                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V   |
| C413                | 1-135-072-21 | s TANTALUM, CHIP 0.22uF 10% 35V   |
| C414                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C415                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C416                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C417                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C418                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C419                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V      |
| C420                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C424                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C425                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V         |
| C426                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C427                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V      |
| C428                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C429                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C430                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C431                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V   |
| C432                | 1-163-137-00 | s CERAMIC, CHIP 680PF 5% 50V      |
| C433                | 1-124-902-00 | s ELECT 0.47uF 20% 50V            |
| C435                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C436                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V      |
| C437                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C438                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C439                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V      |
| C440                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C441                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C442                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C443                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C447                | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C448                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C449                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V   |
| C450                | 1-163-012-00 | s CERAMIC CHIP 1800PF 10% 50V     |
| C451                | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C452                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C453                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C454                | 1-162-587-11 | s CERAMIC, CHIP 0.039uF 10% 25V   |
| C456                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V      |
| C457                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V  |
| C458                | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C459                | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V       |
| C460                | 1-163-020-00 | s CERAMIC, CHIP 0.0082uF 10% 50V  |
| C461                | 1-163-137-00 | s CERAMIC, CHIP 680PF 5% 50V      |
| C462                | 1-135-149-21 | s TANTALUM, CHIP 2.2uF 10% 10V    |

(AU-157AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C463                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V  |
| C464                | 1-135-072-21 | s TANTALUM, CHIP 0.22uF 10% 35V  |
| C468                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C469                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C470                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C471                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C501                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C502                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C503                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C504                | 1-162-587-11 | s CERAMIC, CHIP 0.039uF 10% 25V  |
| C505                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C506                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C507                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V |
| C508                | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V      |
| C509                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C510                | 1-163-020-00 | s CERAMIC, CHIP 0.0082uF 10% 50V |
| C511                | 1-135-149-21 | s TANTALUM, CHIP 2.2uF 10% 10V   |
| C512                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V  |
| C513                | 1-135-072-21 | s TANTALUM, CHIP 0.22uF 10% 35V  |
| C516                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C517                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C518                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C519                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C520                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C521                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C522                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C523                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C524                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C525                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C526                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C532                | 1-163-137-00 | s CERAMIC, CHIP 680PF 5% 50V     |
| C533                | 1-124-902-00 | s ELECT 0.47uF 20% 50V           |
| C535                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C536                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C537                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C538                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C539                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C540                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C543                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C550                | 1-163-012-00 | s CERAMIC CHIP 1800PF 10% 50V    |
| C551                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C552                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C553                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C554                | 1-162-587-11 | s CERAMIC, CHIP 0.039uF 10% 25V  |
| C555                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |
| C556                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C557                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V |
| C559                | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V      |
| C560                | 1-163-020-00 | s CERAMIC, CHIP 0.0082uF 10% 50V |
| C561                | 1-163-137-00 | s CERAMIC, CHIP 680PF 5% 50V     |
| C562                | 1-135-149-21 | s TANTALUM, CHIP 2.2uF 10% 10V   |
| C563                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V  |
| C564                | 1-135-072-21 | s TANTALUM, CHIP 0.22uF 10% 35V  |
| C571                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C601                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C602                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C603                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C605                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C606                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |

## (AU-157AP BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description                |
|---------------------|----------------|-------------------------------|
| C607                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C608                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C609                | 1-162-921-11 s | CERAMIC, CHIP 33PF 5% 50V     |
| C610                | 1-162-921-11 s | CERAMIC, CHIP 33PF 5% 50V     |
| C611                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C612                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C613                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C614                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C615                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C616                | 1-135-155-21 s | TANTALUM, CHIP 4.7uF 10% 16V  |
| C617                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C618                | 1-135-155-21 s | TANTALUM, CHIP 4.7uF 10% 16V  |
| C619                | 1-135-155-21 s | TANTALUM, CHIP 4.7uF 10% 16V  |
| C621                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C622                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C623                | 1-135-166-21 s | TANTALUM, CHIP 47uF 10% 10V   |
| C624                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C625                | 1-135-155-21 s | TANTALUM, CHIP 4.7uF 10% 16V  |
| C626                | 1-161-377-00 s | CERAMIC 0.0047uF 20% 50V      |
| C701                | 1-162-970-11 s | CERAMIC, CHIP 0.01uF 10% 25V  |
| C702                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C703                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C704                | 1-162-913-11 s | CERAMIC 8PF 50V               |
| C705                | 1-162-915-11 s | CERAMIC, CHIP 10PF 50V        |
| C706                | 1-163-275-11 s | CERAMIC, CHIP 0.001uF 5% 50V  |
| C707                | 1-124-499-11 s | ELECT, NONPOLAR 1uF 20% 50V   |
| C708                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C709                | 1-162-970-11 s | CERAMIC, CHIP 0.01uF 10% 25V  |
| C710                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C711                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C712                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C713                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C714                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C715                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C716                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C717                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C718                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C719                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C720                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C721                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C722                | 1-162-915-11 s | CERAMIC, CHIP 10PF 50V        |
| C801                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C803                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C805                | 1-163-133-00 s | CERAMIC, CHIP 470PF 5% 50V    |
| C806                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C807                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C808                | 1-162-970-11 s | CERAMIC, CHIP 0.01uF 10% 25V  |
| C809                | 1-162-918-11 s | CERAMIC, CHIP 18PF 5% 50V     |
| C810                | 1-162-918-11 s | CERAMIC, CHIP 18PF 5% 50V     |
| C811                | 1-162-919-11 s | CERAMIC, CHIP 22PF 5% 50V     |
| C812                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C813                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C814                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C815                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C816                | 1-162-913-11 s | CERAMIC 8PF 50V               |
| C817                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C818                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C819                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C820                | 1-124-499-11 s | ELECT, NONPOLAR 1uF 20% 50V   |

## (AU-157AP BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description                |
|---------------------|----------------|-------------------------------|
| C821                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C822                | 1-162-970-11 s | CERAMIC, CHIP 0.01uF 10% 25V  |
| C823                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C824                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C825                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C826                | 1-135-211-11 s | TANTALUM, CHIP 6.8uF 20% 6.3V |
| C827                | 1-162-915-11 s | CERAMIC, CHIP 10PF 50V        |
| C828                | 1-163-275-11 s | CERAMIC, CHIP 0.001uF 5% 50V  |
| C829                | 1-162-910-11 s | CERAMIC, CHIP 5PF 50V         |
| C951                | 1-124-916-11 s | ELECT 22uF 20% 63V            |
| C952                | 1-124-916-11 s | ELECT 22uF 20% 63V            |
| C953                | 1-124-916-11 s | ELECT 22uF 20% 63V            |
| C954                | 1-124-916-11 s | ELECT 22uF 20% 63V            |
| C955                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C956                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C957                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C958                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C960                | 1-126-933-11 s | ELECT 100uF 20% 16V           |
| C961                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C962                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C963                | 1-126-933-11 s | ELECT 100uF 20% 16V           |
| C964                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C965                | 1-163-035-00 s | CERAMIC, CHIP 0.047uF 50V     |
| C966                | 1-128-057-11 s | ELECT 330uF 20% 6.3V          |
| C967                | 1-130-487-00 s | MYLAR 0.022uF 5% 50V          |
| CN64                | 1-506-484-11 s | CONNECTOR, 5P, MALE           |
| CN65                | 1-506-487-11 s | CONNECTOR 8P, MALE            |
| CN251               | 1-563-863-21 o | CONNECTOR, 26P, MALE          |
| CN601               | 1-573-782-21 o | CONNECTOR, PHEC 60P, MALE     |
| CN602               | 1-573-782-21 o | CONNECTOR, PHEC 60P, MALE     |
| CV701               | 1-141-423-61 s | CAP, TRIMMER                  |
| CV801               | 1-141-423-61 s | CAP, TRIMMER                  |
| D601                | 8-719-941-86 s | DIODE DAN202U                 |
| D602                | 8-719-941-09 s | DIODE DAP202U                 |
| D603                | 8-719-941-09 s | DIODE DAP202U                 |
| D604                | 8-719-941-86 s | DIODE DAN202U                 |
| D605                | 8-719-941-09 s | DIODE DAP202U                 |
| D606                | 8-719-941-86 s | DIODE DAN202U                 |
| D701                | 8-713-300-88 s | DIODE 1T33C-01                |
| D801                | 8-719-941-09 s | DIODE DAP202U                 |
| D802                | 8-713-300-88 s | DIODE 1T33C-01                |
| FL401               | 1-235-900-11 s | FILTER, LOW-PASS 13kHz        |
| FL402               | 1-235-900-11 s | FILTER, LOW-PASS 13kHz        |
| FL501               | 1-235-900-11 s | FILTER, LOW-PASS 13kHz        |
| FL502               | 1-235-900-11 s | FILTER, LOW-PASS 13kHz        |
| IC301               | 8-759-925-97 s | IC SN74HC86ANS                |
| IC401               | 8-759-700-43 s | IC NJM4558M                   |
| IC402               | 8-752-009-90 s | IC CX20099                    |
| IC403               | 8-759-700-43 s | IC NJM4558M                   |
| IC404               | 8-752-322-57 s | IC CXD1077M                   |
| IC405               | 8-759-929-26 s | IC TL431CPS                   |
| IC406               | 8-752-322-57 s | IC CXD1077M                   |
| IC407               | 8-759-929-26 s | IC TL431CPS                   |
| IC408               | 8-759-700-43 s | IC NJM4558M                   |
| IC409               | 8-752-009-90 s | IC CX20099                    |
| IC410               | 8-759-603-27 s | IC M5201FP                    |
| IC501               | 8-759-700-43 s | IC NJM4558M                   |
| IC503               | 8-759-700-43 s | IC NJM4558M                   |

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|---------------------|--------------|------------------------|
| IC508               | 8-759-700-43 | s IC NJM4558M          |
| IC510               | 8-759-603-27 | s IC M5201FP           |
| IC601               | 8-759-149-34 | s IC UPD75106G-591-1B  |
| IC603               | 8-759-300-71 | s IC HD14053BFP        |
| IC604               | 8-752-324-45 | s IC CXD1066Q-Z        |
| IC605               | 8-759-972-13 | s IC CF77309FR         |
| IC606               | 8-752-835-09 | s IC CXP5084H-645Q     |
| IC607               | 8-759-054-79 | s IC CF77499PG         |
| IC608               | 8-759-176-00 | s IC CXD8369AQ         |
| IC609               | 8-759-926-77 | s IC SN74HC541NS       |
| IC610               | 8-759-926-77 | s IC SN74HC541NS       |
| IC611               | 8-759-925-90 | s IC SN74HC74NS        |
| IC612               | 8-759-239-58 | s IC TC74HC221AF       |
| IC613               | 8-759-926-18 | s IC SN74HC157ANS      |
| IC701               | 8-752-010-20 | s IC CX20102           |
| IC702               | 8-752-332-46 | s IC CXD1208Q          |
| IC703               | 8-752-331-00 | s IC CXK5864BM-12L     |
| IC704               | 8-759-926-18 | s IC SN74HC157ANS      |
| IC705               | 8-759-926-18 | s IC SN74HC157ANS      |
| IC706               | 8-759-926-18 | s IC SN74HC157ANS      |
| IC801               | 8-752-010-20 | s IC CX20102           |
| IC802               | 8-752-332-46 | s IC CXD1208Q          |
| IC803               | 8-752-331-00 | s IC CXK5864BM-12L     |
| L402                | 1-410-658-31 | s INDUCTOR, CHIP 220uH |
| L403                | 1-410-658-31 | s INDUCTOR, CHIP 220uH |
| L601                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L603                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L604                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L606                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L607                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L608                | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L701                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L702                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L703                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L704                | 1-408-970-21 | s INDUCTOR 10uH        |
| L705                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L801                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L802                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L803                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L804                | 1-408-970-21 | s INDUCTOR 10uH        |
| L805                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L952                | 1-408-978-21 | s INDUCTOR 47uH        |
| L953                | 1-408-978-21 | s INDUCTOR 47uH        |
| L954                | 1-412-533-21 | s INDUCTOR, 47uH       |
| L955                | 1-412-533-21 | s INDUCTOR, 47uH       |
| L956                | 1-412-533-21 | s INDUCTOR, 47uH       |
| Q401                | 8-729-209-07 | s TRANSISTOR 2SC4213-B |
| Q402                | 8-729-209-07 | s TRANSISTOR 2SC4213-B |
| Q501                | 8-729-209-07 | s TRANSISTOR 2SC4213-B |
| Q502                | 8-729-209-07 | s TRANSISTOR 2SC4213-B |
| Q602                | 8-729-905-18 | s TRANSISTOR DTC144EU  |
| Q603                | 8-729-905-18 | s TRANSISTOR DTC144EU  |
| Q604                | 8-729-905-18 | s TRANSISTOR DTC144EU  |
| Q605                | 8-729-209-07 | s TRANSISTOR 2SC4213-B |
| Q606                | 8-729-905-12 | s TRANSISTOR DTA144EU  |
| Q607                | 8-729-905-18 | s TRANSISTOR DTC144EU  |
| Q608                | 8-729-905-18 | s TRANSISTOR DTC144EU  |
| Q609                | 8-729-905-12 | s TRANSISTOR DTA144EU  |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| Q610                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q611                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q612                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q613                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| Q701                | 8-729-117-72 | s TRANSISTOR 2SC4178        |
| Q801                | 8-729-117-72 | s TRANSISTOR 2SC4178        |
| Q802                | 8-729-117-16 | s TRANSISTOR 2SA1611-M6     |
| Q803                | 8-729-117-72 | s TRANSISTOR 2SC4178        |
| Q806                | 8-729-907-00 | s TRANSISTOR DTC114EU       |
| R401                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R402                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W  |
| R403                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
| R404                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R405                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R406                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R407                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R408                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R409                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R410                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W  |
| R411                | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W |
| R412                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W  |
| R413                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R414                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R415                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R416                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R417                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
| R418                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R419                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R420                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W  |
| R422                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W  |
| R423                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R424                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R425                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R427                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R428                | 1-216-816-11 | s METAL, CHIP 390 5% 1/16W  |
| R429                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W   |
| R430                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R431                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
| R434                | 1-216-811-11 | s METAL, CHIP 150 5% 1/16W  |
| R435                | 1-218-768-11 | s METAL 470K 0.5% 1/10W     |
| R436                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W  |
| R437                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W   |
| R438                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R439                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W   |
| R440                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R441                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R442                | 1-216-816-11 | s METAL, CHIP 390 5% 1/16W  |
| R443                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W   |
| R444                | 1-216-855-11 | s METAL, CHIP 680K 5% 1/16W |
| R445                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R446                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
| R448                | 1-216-811-11 | s METAL, CHIP 150 5% 1/16W  |
| R449                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W  |
| R450                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
| R451                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R452                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W  |
| R453                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W  |
| R454                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W |
| R456                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R457                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R458                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R459                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R460                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R461                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R462                | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W    |
| R463                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W     |
| R464                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R465                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R466                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R467                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R468                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R469                | 1-218-708-11 | s METAL, CHIP 4.7K 0.50% 1/16W |
| R470                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R471                | 1-218-708-11 | s METAL, CHIP 4.7K 0.50% 1/16W |
| R472                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R473                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R474                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R475                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R476                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R477                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R501                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R502                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W     |
| R503                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R504                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R505                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R506                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R507                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R508                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R509                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R510                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R511                | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W    |
| R512                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W     |
| R513                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R514                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R515                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R516                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W    |
| R517                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R518                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W    |
| R519                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W    |
| R520                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W     |
| R522                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W     |
| R523                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R524                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R525                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R536                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W     |
| R538                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R540                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R541                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R549                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W     |
| R550                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R552                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W     |
| R553                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W     |
| R554                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W    |
| R556                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R557                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R558                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R559                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R560                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R561                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R562                | 1-216-828-11 | s METAL, CHIP 3.9K 5% 1/16W |
| R563                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W  |
| R564                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R565                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R566                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R567                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R568                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R570                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R576                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R577                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W  |
| R601                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R602                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R603                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R604                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R605                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R606                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R607                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R609                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R610                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R611                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R612                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R613                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R614                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R615                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R616                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R617                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R618                | 1-216-836-11 | s METAL, CHIP 18K 5% 1/16W  |
| R619                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R620                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R621                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R622                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R623                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R624                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R625                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R626                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R627                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R628                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R629                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R630                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R631                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R632                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R633                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R634                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R635                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R636                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R637                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R638                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R639                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R640                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R641                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R642                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R643                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R644                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R645                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R646                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R647                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R648                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R649                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |

## (AU-157AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R650                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R651                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R652                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R653                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R654                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R655                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R656                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R657                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R658                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R659                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R660                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R661                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R662                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R663                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R664                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R665                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R668                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R669                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R670                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R671                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R672                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R673                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R674                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R675                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R676                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W  |
| R677                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R678                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R679                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R680                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R681                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R683                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R686                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R687                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R688                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R689                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R690                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R691                | 1-247-887-11 | s CARBON 220K 5% 1/4W       |
| R701                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R702                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R703                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W  |
| R704                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R705                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R706                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R707                | 1-216-847-11 | s METAL, CHIP 150K 5% 1/16W |
| R708                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W  |
| R709                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R710                | 1-216-846-11 | s METAL, CHIP 120K 5% 1/16W |
| R711                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R718                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W    |
| R720                | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W   |
| R721                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R722                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R723                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R724                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R801                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R802                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R803                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R804                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W    |
| R805                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |

## (AU-157AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description               |
|---------------------|--------------|------------------------------|
| R806                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W   |
| R808                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W   |
| R809                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W     |
| R810                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W   |
| R811                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W  |
| R814                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W   |
| R815                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W  |
| R816                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W  |
| R817                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W  |
| R818                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W   |
| R819                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W    |
| R820                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W    |
| R821                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W    |
| R822                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W   |
| R823                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W  |
| R824                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W  |
| R825                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W  |
| R826                | 1-216-847-11 | s METAL, CHIP 150K 5% 1/16W  |
| R827                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W   |
| R828                | 1-216-810-11 | s METAL, CHIP 120 5% 1/16W   |
| R829                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W   |
| R830                | 1-216-846-11 | s METAL, CHIP 120K 5% 1/16W  |
| R831                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W    |
| R832                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W    |
| R833                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W     |
| R890                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W   |
| R900                | 1-218-738-11 | s METAL, CHIP 82K 0.5% 1/16W |
| RV402               | 1-238-803-11 | s RES, ADJ METAL 20K         |
| RV403               | 1-238-785-21 | s RES, ADJ, CERMET 2K        |
| RV408               | 1-238-792-11 | s RES, ADJ, CERMET 500K      |
| RV502               | 1-238-803-11 | s RES, ADJ METAL 20K         |
| RV503               | 1-238-785-21 | s RES, ADJ, CERMET 2K        |
| RV701               | 1-237-515-21 | s RES, ADJ METAL 1K          |
| RV803               | 1-238-800-11 | s RES, ADJ METAL 2K          |
| RV804               | 1-238-803-11 | s RES, ADJ METAL 20K         |
| X601                | 1-567-519-21 | s CRYSTAL 4.194304MHZ        |
| X602                | 1-567-346-11 | s RESONATOR, CERAMIC         |



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CN-551P BOARD  
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Ref. No.

or Q'ty Part No. SP Description

1pc 1-642-953-14 o PRINTED CIRCUIT BOARD, CN-551

C1 1-163-038-91 s CERAMIC, CHIP 0.1uF 25V  
C2 1-126-189-11 s ELECT 0.22uF 20% 50V  
C3 1-126-191-11 s ELECT 0.47uF 20% 50V  
C4 1-126-603-11 s ELECT 4.7uF 20% 35V  
C5 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

C6 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V  
C7 1-163-038-91 s CERAMIC, CHIP 0.1uF 25V

CN331 1-506-481-11 s CONNECTOR, 2P, MALE  
CN332 1-564-014-11 s CONNECTOR, 4P, MALE  
CN333 1-506-484-11 s CONNECTOR, 5P, MALE  
CN334 1-506-481-11 s CONNECTOR, 2P, MALE  
CN335 1-506-477-11 s CONNECTOR, 12P, MALE

CN336 1-506-473-11 o CONNECTOR, 8P, MALE  
CN337 1-506-475-11 s CONNECTOR, 10P, MALE  
CN338 1-564-009-11 o CONNECTOR, 10P, MALE  
CN339 1-506-476-11 s CONNECTOR, 11P, MALE  
CN340 1-506-480-11 o CONNECTOR, 15P, MALE

CN341 1-506-483-21 s CONNECTOR, 4P, MALE  
CN342 1-506-483-21 s CONNECTOR, 4P, MALE  
CN343 1-565-211-11 o CONNECTOR, FPC (ZIF) 22P, FEMALE  
CN344 1-566-527-11 s CONNECTOR, FPC (ZIF) 11P, FEMALE  
CN345 1-566-531-11 s CONNECTOR, FPC (ZIF) 15P, FEMALE

CN346 1-564-014-11 s CONNECTOR, 4P, MALE  
CN347 1-506-481-11 s CONNECTOR, 2P, MALE  
CN348 1-506-471-11 s CONNECTOR, 6P, MALE

IC1 8-759-107-68 s IC CX20115A  
IC2 8-759-701-97 s IC NJM4562M

R2 1-218-750-11 s METAL, CHIP 270K 0.50% 1/16W  
R3 1-218-716-11 s METAL, CHIP 10K 0.50% 1/16W  
R4 1-218-716-11 s METAL, CHIP 10K 0.50% 1/16W  
R5 1-218-716-11 s METAL, CHIP 10K 0.50% 1/16W  
R6 1-218-716-11 s METAL, CHIP 10K 0.50% 1/16W

R7 1-216-854-11 s METAL, CHIP 560K 5% 1/16W  
R8 1-216-854-11 s METAL, CHIP 560K 5% 1/16W  
R10 1-216-809-11 s METAL, CHIP 100 5% 1/16W  
R11 1-216-809-11 s METAL, CHIP 100 5% 1/16W

RV1 1-228-470-00 s RES, ADJ METAL 500

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CP-176P BOARD  
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Ref. No.

or Q'ty Part No. SP Description

1pc 1-642-967-11 o PRINTED CIRCUIT BOARD, CP-176  
1pc 3-683-631-01 o CLAMP  
1pc 1-543-793-11 s FILTER, CLAMP (FERRITE CORE)

C1 1-161-772-11 s CERAMIC 0.1uF 10% 25V

CN1001 1-573-582-11 s CONNECTOR, BNC, FEMALE  
CN1002 1-573-583-11 s CONNECTOR, BNC, FEMALE  
CN1003 1-573-582-11 s CONNECTOR, BNC, FEMALE  
CN1004 1-573-602-11 s CONNECTOR 8P (MONITOR), FEMALE  
CN1005 1-691-273-11 s JACK, PIN 1P

CN1006 1-573-591-11 s CONNECTOR, CIRCULAR 7P, FEMALE  
CN1008 1-695-195-11 s CONNECTOR, CIRCULAR 7P, MALE  
CN1010 1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE  
CN1011 1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE

R1 1-215-394-00 s METAL 75 1% 1/6W  
R2 1-215-394-00 s METAL 75 1% 1/6W  
R3 1-215-394-00 s METAL 75 1% 1/6W  
R5 1-215-394-00 s METAL 75 1% 1/6W  
R7 1-215-394-00 s METAL 75 1% 1/6W

R8 1-215-394-00 s METAL 75 1% 1/6W

S1 1-570-145-11 s SWITCH, SLIDE

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CP-177 BOARD  
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Ref. No.

or Q'ty Part No. SP Description

|        |              |   |                               |
|--------|--------------|---|-------------------------------|
| 1pc    | 1-642-968-12 | o | PRINTED CIRCUIT BOARD, CP-177 |
| 1pc    | 3-683-631-01 | o | CLAMP                         |
| CN1051 | 1-573-594-11 | s | CONNECTOR, XLR 3P, FEMALE     |
| CN1052 | 1-573-594-11 | s | CONNECTOR, XLR 3P, FEMALE     |
| CN1053 | 1-573-594-11 | s | CONNECTOR, XLR 3P, FEMALE     |
| CN1054 | 1-573-594-11 | s | CONNECTOR, XLR 3P, FEMALE     |
| CN1055 | 1-573-593-11 | s | CONNECTOR, XLR 3P, MALE       |
| CN1056 | 1-573-593-11 | s | CONNECTOR, XLR 3P, MALE       |
| CN1057 | 1-573-593-11 | s | CONNECTOR, XLR 3P, MALE       |
| CN1058 | 1-573-593-11 | s | CONNECTOR, XLR 3P, MALE       |
| R1     | 1-249-415-11 | s | CARBON 680 5% 1/4W            |
| R2     | 1-247-855-31 | s | CARBON 10K 5% 1/4W            |
| R3     | 1-249-415-11 | s | CARBON 680 5% 1/4W            |
| R4     | 1-247-855-31 | s | CARBON 10K 5% 1/4W            |
| R5     | 1-249-415-11 | s | CARBON 680 5% 1/4W            |
| R6     | 1-247-855-31 | s | CARBON 10K 5% 1/4W            |
| R9     | 1-249-415-11 | s | CARBON 680 5% 1/4W            |
| R10    | 1-247-855-31 | s | CARBON 10K 5% 1/4W            |
| S1051  | 1-570-145-11 | s | SWITCH, SLIDE                 |
| S1052  | 1-570-145-11 | s | SWITCH, SLIDE                 |

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CR-40 BOARD  
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Ref. No.

or Q'ty Part No. SP Description

|      |              |   |                              |
|------|--------------|---|------------------------------|
| 1pc  | A-8276-234-A | o | MOUNTED CIRCUIT BOARD, CR-40 |
| C365 | 1-162-970-11 | s | CERAMIC, CHIP 0.01uF 10% 25V |
| C366 | 1-135-165-11 | s | TANTALUM 33uF 20% 16V        |
| C367 | 1-135-165-11 | s | TANTALUM 33uF 20% 16V        |
| C368 | 1-135-166-21 | s | TANTALUM, CHIP 47uF 10% 10V  |
| C369 | 1-164-346-11 | s | CERAMIC 1uF 16V              |
| C370 | 1-135-227-11 | s | TANTAL 100uF 20% 6.3V        |
| C371 | 1-135-227-11 | s | TANTAL 100uF 20% 6.3V        |
| C372 | 1-163-038-91 | s | CERAMIC, CHIP 0.1uF 25V      |
| C373 | 1-135-166-21 | s | TANTALUM, CHIP 47uF 10% 10V  |
| C374 | 1-162-970-11 | s | CERAMIC, CHIP 0.01uF 10% 25V |
| C375 | 1-162-970-11 | s | CERAMIC, CHIP 0.01uF 10% 25V |
| C376 | 1-135-165-11 | s | TANTALUM 33uF 20% 16V        |
| CN11 | 1-566-096-11 | s | CONNECTOR, BB 12P, MALE      |
| IC23 | 8-759-030-55 | s | IC MC1496M                   |
| L87  | 1-408-785-21 | s | INDUCTOR CHIP 47uH           |
| L88  | 1-408-785-21 | s | INDUCTOR CHIP 47uH           |
| Q141 | 8-729-120-28 | s | TRANSISTOR 2SC1623-L5L6      |
| Q142 | 8-729-905-18 | s | TRANSISTOR DTC144EU          |
| Q143 | 8-729-905-18 | s | TRANSISTOR DTC144EU          |
| Q144 | 8-729-120-28 | s | TRANSISTOR 2SC1623-L5L6      |
| R464 | 1-216-837-11 | s | METAL, CHIP 22K 5% 1/16W     |
| R465 | 1-216-837-11 | s | METAL, CHIP 22K 5% 1/16W     |
| R466 | 1-216-845-11 | s | METAL, CHIP 100K 5% 1/16W    |
| R467 | 1-216-833-11 | s | METAL, CHIP 10K 5% 1/16W     |
| R468 | 1-216-821-11 | s | METAL, CHIP 1K 5% 1/16W      |
| R469 | 1-216-821-11 | s | METAL, CHIP 1K 5% 1/16W      |
| R470 | 1-218-289-11 | s | METAL, CHIP 510 5% 1/16W     |
| R471 | 1-216-829-11 | s | METAL, CHIP 4.7K 5% 1/16W    |
| R472 | 1-216-829-11 | s | METAL, CHIP 4.7K 5% 1/16W    |
| R473 | 1-218-289-11 | s | METAL, CHIP 510 5% 1/16W     |
| R474 | 1-216-821-11 | s | METAL, CHIP 1K 5% 1/16W      |
| R475 | 1-216-821-11 | s | METAL, CHIP 1K 5% 1/16W      |
| R476 | 1-218-272-11 | s | METAL, CHIP 5.1K 5% 1/16W    |
| R477 | 1-216-825-11 | s | METAL, CHIP 2.2K 5% 1/16W    |
| R478 | 1-216-825-11 | s | METAL, CHIP 2.2K 5% 1/16W    |
| R479 | 1-216-809-11 | s | METAL, CHIP 100 5% 1/16W     |
| R480 | 1-216-825-11 | s | METAL, CHIP 2.2K 5% 1/16W    |
| R709 | 1-216-821-11 | s | METAL, CHIP 1K 5% 1/16W      |
| RV18 | 1-241-262-11 | s | RES, ADJ, CERMET 2K          |
| RV19 | 1-241-262-11 | s | RES, ADJ, CERMET 2K          |
| RV20 | 1-241-262-11 | s | RES, ADJ, CERMET 2K          |
| RV21 | 1-241-261-41 | s | RES, ADJ, CERMET 1K          |

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CR-41 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8276-244-A | o MOUNTED CIRCUIT BOARD, CR-41  |
| C422                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C423                | 1-135-165-11 | s TANTALUM 33uF 20% 16V         |
| C424                | 1-135-165-11 | s TANTALUM 33uF 20% 16V         |
| C425                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V   |
| C427                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V         |
| C428                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V         |
| C429                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C430                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V   |
| C431                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C432                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C433                | 1-135-165-11 | s TANTALUM 33uF 20% 16V         |
| C434                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C435                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V |
| CN11                | 1-566-096-11 | s CONNECTOR, BB 12P, MALE       |
| CN12                | 1-566-096-11 | s CONNECTOR, BB 12P, MALE       |
| IC23                | 8-759-030-55 | s IC MC1496M                    |
| IC29                | 8-759-030-55 | s IC MC1496M                    |
| L96                 | 1-410-389-31 | s INDUCTOR CHIP 47uH            |
| L97                 | 1-410-389-31 | s INDUCTOR CHIP 47uH            |
| Q156                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6       |
| Q157                | 8-729-905-18 | s TRANSISTOR DTC144EU           |
| Q158                | 8-729-905-18 | s TRANSISTOR DTC144EU           |
| Q159                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6       |
| Q160                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6       |
| Q161                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6       |
| R528                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W      |
| R529                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W      |
| R530                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W     |
| R531                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W      |
| R532                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R533                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R534                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W     |
| R535                | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W      |
| R536                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W     |
| R537                | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W      |
| R538                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R539                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R540                | 1-218-272-11 | s METAL, CHIP 5.1K 5% 1/16W     |
| R541                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R542                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R543                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W      |
| R544                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R545                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R546                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W     |
| R547                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R548                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W      |
| R707                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W       |
| R708                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W      |
| RV23                | 1-241-262-11 | s RES, ADJ, CERMET 2K           |
| RV24                | 1-241-262-11 | s RES, ADJ, CERMET 2K           |
| RV25                | 1-241-262-11 | s RES, ADJ, CERMET 2K           |
| RV26                | 1-241-261-41 | s RES, ADJ, CERMET 1K           |
| RV27                | 1-241-261-41 | s RES, ADJ, CERMET 1K           |

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DC-57P BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| 1pc                 | 1-643-015-12 | o PRINTED CIRCUIT BOARD, DC-57 |
| 2pcs                | 7-621-759-65 | s SCREW +PSW 2.6x8             |
| 1pc                 | 3-334-236-01 | s SHEET, INSULATING            |
| 1pc                 | 2-371-561-01 | s BUSHING (P), INSULATING      |
| 1pc                 | 7-682-947-01 | s SCREW +PSW 3x6               |
| C1                  | 1-124-898-11 | s ELECT 4700uF 20% 16V         |
| C2                  | 1-124-360-00 | s ELECT 1000uF 20% 16V         |
| C3                  | 1-124-360-00 | s ELECT 1000uF 20% 16V         |
| C4                  | 1-124-472-11 | s ELECT 470uF 20% 10V          |
| C5                  | 1-161-055-00 | s CERAMIC 0.022uF 10% 50V      |
| C6                  | 1-161-055-00 | s CERAMIC 0.022uF 10% 50V      |
| C7                  | 1-124-477-11 | s ELECT 47uF 20% 25V           |
| C8                  | 1-124-477-11 | s ELECT 47uF 20% 25V           |
| C9                  | 1-126-939-11 | s ELECT 10000uF 20% 10V        |
| CN261               | 1-564-210-00 | o CONNECTOR, IL-S 12P, MALE    |
| CN262               | 1-564-706-11 | o CONNECTOR, 4P, MALE          |
| CN263               | 1-564-708-11 | o CONNECTOR 6P, MALE           |
| CN264               | 1-564-710-11 | s PIN HEADER, STRAIGHT 8P      |
| CN265               | 1-564-209-00 | o CONNECTOR, IL-S 10P, MALE    |
| D1                  | 8-719-200-02 | s DIODE 10E2                   |
| FB1                 | 1-410-858-21 | o INDUCTOR, MICRO SALL TYPE    |
| FB2                 | 1-410-858-21 | o INDUCTOR, MICRO SALL TYPE    |
| FB3                 | 1-410-858-21 | o INDUCTOR, MICRO SALL TYPE    |
| IC1                 | 8-759-701-75 | s IC NJM7805FA                 |
| Q1                  | 8-729-382-64 | s TRANSISTOR 2SC1826-G         |
| R1                  | 1-215-907-11 | s METAL, CHIP 22 10% 3W        |

## DD-12 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-7061-772-A o MOUNTED CIRCUIT BOARD, DD-12  
 1pc 1-535-699-11 s CABLE, JUMPER 23P

C301 1-124-472-11 s ELECT 470uF 20% 10V

CN751 1-506-489-11 o CONNECTOR 10P, MALE  
 CN752 1-506-491-11 o CONNECTOR, 12P, MALE

D1 8-719-911-19 s DIODE 1SS119  
 D321 8-719-911-19 s DIODE 1SS119

IC2 8-759-645-16 s IC M54516P  
 IC3 8-759-645-16 s IC M54516P

Q308 8-729-903-02 s TRANSISTOR DTA143XS  
 Q309 8-729-903-02 s TRANSISTOR DTA143XS  
 Q310 8-729-903-02 s TRANSISTOR DTA143XS  
 Q311 8-729-903-02 s TRANSISTOR DTA143XS  
 Q312 8-729-903-02 s TRANSISTOR DTA143XS

Q313 8-729-903-02 s TRANSISTOR DTA143XS  
 Q314 8-729-903-02 s TRANSISTOR DTA143XS

R366 1-249-402-11 s CARBON 56 5% 1/4W  
 R367 1-249-402-11 s CARBON 56 5% 1/4W  
 R368 1-249-402-11 s CARBON 56 5% 1/4W  
 R369 1-249-402-11 s CARBON 56 5% 1/4W  
 R370 1-249-402-11 s CARBON 56 5% 1/4W

R371 1-249-402-11 s CARBON 56 5% 1/4W  
 R372 1-249-402-11 s CARBON 56 5% 1/4W

S1009 1-516-995-00 s SWITCH, LEVER SLIDE  
 S1010 1-552-539-00 s SWITCH, TACTILE

## DM-92 BOARD

Ref. No.

or Q'ty Part No. SP Description

1pc A-8271-856-A o MOUNTED CIRCUIT BOARD, DM-92  
 2pcs 2-251-622-11 s LEVER, PC BOARD  
 5pcs 1-623-599-11 o PRINTED CIRCUIT BOARD, DUS-194

C1 1-124-916-11 s ELECT 22uF 20% 63V  
 C2 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C3 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C5 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C7 1-163-127-00 s CERAMIC, CHIP 270PF 5% 50V

C8 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V  
 C9 1-163-145-00 s CERAMIC, CHIP 0.0015uF 5% 50V  
 C10 1-163-127-00 s CERAMIC, CHIP 270PF 5% 50V  
 C12 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V  
 C13 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V

C14 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C15 1-163-257-11 s CERAMIC, CHIP 180PF 5% 50V  
 C16 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V  
 C17 1-163-245-11 s CERAMIC 56PF 5% 50V  
 C18 1-163-245-11 s CERAMIC 56PF 5% 50V

C19 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V  
 C20 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C33 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C34 1-126-964-11 s ELECT 10uF 20% 50V  
 C35 1-164-232-11 s CERAMIC 0.01uF 10% 100V

C36 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C39 1-163-038-91 s CERAMIC, CHIP 0.1uF 25V  
 C43 1-163-038-91 s CERAMIC, CHIP 0.1uF 25V  
 C54 1-162-999-11 s CERAMIC, CHIP 91PF 5% 50V  
 C60 1-163-038-91 s CERAMIC, CHIP 0.1uF 25V

C75 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V  
 C76 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C77 1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V  
 C78 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C79 1-163-089-00 s CERAMIC, CHIP 6PF 50V

C80 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V  
 C81 1-163-113-00 s CERAMIC, CHIP 68PF 5% 50V  
 C82 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C83 1-126-947-11 s ELECT 47uF 20% 35V  
 C84 1-163-224-91 s CERAMIC, CHIP 7PF 0.25PF 50V

C85 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C86 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V  
 C88 1-163-234-11 s CERAMIC, CHIP 20PF 5% 50V  
 C89 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C90 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C91 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C92 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C93 1-163-037-91 s CERAMIC, CHIP 0.022uF 10% 25V  
 C94 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V  
 C96 1-164-232-11 s CERAMIC 0.01uF 10% 100V

C97 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C98 1-163-087-00 s CERAMIC, CHIP 4PF 50V  
 C99 1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V  
 C100 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V  
 C101 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C111 1-164-232-11 s CERAMIC 0.01uF 10% 100V  
 C145 1-163-115-00 s CERAMIC, CHIP 82PF 5% 50V  
 C146 1-126-947-11 s ELECT 47uF 20% 35V  
 C148 1-163-091-00 s CERAMIC, CHIP 8PF 50V  
 C149 1-163-094-00 s CERAMIC, CHIP 11PF 5% 50V

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| C150                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V   |
| C151                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V   |
| C152                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C153                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C154                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C155                | 1-128-057-11 | s ELECT 330uF 20% 6.3V        |
| C156                | 1-128-057-11 | s ELECT 330uF 20% 6.3V        |
| C157                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C158                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C159                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C160                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C161                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C162                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C163                | 1-163-237-11 | s CERAMIC, CHIP 27PF 5% 50V   |
| C166                | 1-163-091-00 | s CERAMIC, CHIP 8PF 50V       |
| C167                | 1-163-097-00 | s CERAMIC, CHIP 15PF 5% 50V   |
| C168                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V   |
| C169                | 1-163-113-00 | s CERAMIC, CHIP 68PF 5% 50V   |
| C170                | 1-163-094-00 | s CERAMIC, CHIP 11PF 5% 50V   |
| C171                | 1-163-096-00 | s CERAMIC, CHIP 13PF 5% 50V   |
| C172                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V   |
| C173                | 1-163-113-00 | s CERAMIC, CHIP 68PF 5% 50V   |
| C174                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C175                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C176                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C177                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C178                | 1-128-057-11 | s ELECT 330uF 20% 6.3V        |
| C179                | 1-128-057-11 | s ELECT 330uF 20% 6.3V        |
| C199                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C200                | 1-126-964-11 | s ELECT 10uF 20% 50V          |
| C201                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C202                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C203                | 1-126-933-11 | s ELECT 100uF 20% 16V         |
| C204                | 1-126-933-11 | s ELECT 100uF 20% 16V         |
| C228                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C229                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C230                | 1-164-346-11 | s CERAMIC 1uF 16V             |
| C231                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C232                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C233                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C234                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C235                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V |
| C236                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C237                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C238                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C239                | 1-126-964-11 | s ELECT 10uF 20% 50V          |
| C240                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V   |
| C241                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V   |
| C242                | 1-126-964-11 | s ELECT 10uF 20% 50V          |
| C243                | 1-164-346-11 | s CERAMIC 1uF 16V             |
| C244                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C245                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C246                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C247                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C248                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V |
| C249                | 1-126-947-11 | s ELECT 47uF 20% 35V          |
| C250                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C251                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V     |
| C252                | 1-126-964-11 | s ELECT 10uF 20% 50V          |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C253                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C254                | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C255                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C256                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C257                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V   |
| C258                | 1-164-005-11 | s CERAMIC, CHIP 0.47uF 25V      |
| C259                | 1-130-489-00 | s MYLAR 0.033uF 5% 50V          |
| C260                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V   |
| C261                | 1-163-137-00 | s CERAMIC, CHIP 680PF 5% 50V    |
| C262                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V |
| C263                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C264                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C265                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C266                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C267                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C268                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C269                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C270                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V   |
| C271                | 1-164-491-11 | s CERAMIC 300PF 5% 50V          |
| C273                | 1-163-263-91 | s CERAMIC, CHIP 330PF 5% 50V    |
| C274                | 1-163-131-00 | s CERAMIC, CHIP 390PF 5% 50V    |
| C275                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C276                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V   |
| C277                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V    |
| C278                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V   |
| C279                | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C280                | 1-164-005-11 | s CERAMIC, CHIP 0.47uF 25V      |
| C281                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C282                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C283                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C284                | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C285                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C286                | 1-124-916-11 | s ELECT 22uF 20% 63V            |
| C287                | 1-124-916-11 | s ELECT 22uF 20% 63V            |
| C288                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C289                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C290                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C291                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C309                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C310                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C311                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C312                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C317                | 1-163-253-11 | s CERAMIC, CHIP 120PF 5% 50V    |
| C325                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C326                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C327                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C328                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C329                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C330                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C331                | 1-163-014-00 | s CERAMIC 0.0027uF 10% 50V      |
| C332                | 1-163-097-00 | s CERAMIC, CHIP 15PF 5% 50V     |
| C333                | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C334                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C335                | 1-163-118-00 | s CERAMIC, CHIP 110PF 5% 50V    |
| C336                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C337                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V    |
| C338                | 1-124-925-11 | s ELECT 2.2uF 20% 100V          |
| C339                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C340                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C341                | 1-126-963-11 | s ELECT 4.7uF 20% 50V            |
| C342                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C343                | 1-163-131-00 | s CERAMIC, CHIP 390PF 5% 50V     |
| C344                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C345                | 1-163-222-11 | s CERAMIC, CHIP 5PF 50V          |
| C346                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C347                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C348                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C349                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C350                | 1-126-966-11 | s ELECT 33uF 20% 50V             |
| C351                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C352                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C353                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C354                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C355                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C356                | 1-163-113-00 | s CERAMIC, CHIP 68PF 5% 50V      |
| C357                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C358                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C359                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C360                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C361                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V   |
| C362                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V   |
| C363                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C364                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C378                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C379                | 1-163-121-00 | s CERAMIC, CHIP 150PF 5% 50V     |
| C380                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C381                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C382                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C383                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C385                | 1-163-099-00 | s CERAMIC, CHIP 18PF 5% 50V      |
| C386                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C387                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C388                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C389                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C390                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C391                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C392                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C395                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V    |
| C396                | 1-163-227-11 | s CERAMIC, CHIP 10PF 5% 50V      |
| C397                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C398                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C399                | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C400                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C401                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C402                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C403                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C404                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C405                | 1-163-019-00 | s CERAMIC, CHIP 0.0068uF 10% 50V |
| C407                | 1-135-176-21 | s TANTALUM, CHIP 0.68uF 20% 35V  |
| C408                | 1-135-091-00 | s TANTALUM, CHIP 1uF 10% 16V     |
| C409                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C410                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C412                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C413                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C414                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C415                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C416                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C417                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C418                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C419                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C420                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C421                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C435                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V |
| C437                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C438                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C439                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C440                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C441                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V |
| C442                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C455                | 1-163-135-00 | s CERAMIC, CHIP 560PF 5% 50V    |
| C611                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C612                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C613                | 1-163-234-11 | s CERAMIC, CHIP 20PF 5% 50V     |
| C614                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C705                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C706                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C707                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C708                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C709                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C710                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C711                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C712                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C713                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C714                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C715                | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C717                | 1-163-239-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C718                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C719                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C720                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C721                | 1-124-916-11 | s ELECT 22uF 20% 63V            |
| C722                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C723                | 1-124-916-11 | s ELECT 22uF 20% 63V            |
| C724                | 1-163-017-00 | s CERAMIC, CHIP 0.0047uF 5% 50V |
| C725                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V         |
| C728                | 1-163-099-00 | s CERAMIC, CHIP 18PF 5% 50V     |
| C729                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V |
| C801                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C802                | 1-163-141-00 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C900                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C901                | 1-123-382-00 | s ELECT 3.3uF 20% 100V          |
| C902                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V   |
| C903                | 1-164-695-11 | s CERAMIC, CHIP 0.0022uF 5% 50V |
| C904                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V    |
| C905                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C906                | 1-163-099-00 | s CERAMIC, CHIP 18PF 5% 50V     |
| C907                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C912                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C916                | 1-126-157-11 | s ELECT 10uF 20% 16V            |
| C917                | 1-107-206-00 | s MICA 15PF 5% 500V             |
| CN11                | 1-566-096-11 | s CONNECTOR, BB 12P, MALE       |
| CN607               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CN608               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CT3                 | 1-141-345-11 | s CAP, TRIMMER 40PF             |
| D1                  | 8-719-941-86 | s DIODE DAN202U                 |
| D2                  | 8-719-941-86 | s DIODE DAN202U                 |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| D5                  | 8-719-941-86 | s DIODE DAN202U                |
| D6                  | 8-719-800-76 | s DIODE 1SS226                 |
| D7                  | 8-719-800-76 | s DIODE 1SS226                 |
| D8                  | 8-719-941-86 | s DIODE DAN202U                |
| D12                 | 8-719-941-86 | s DIODE DAN202U                |
| D13                 | 8-719-941-86 | s DIODE DAN202U                |
| D14                 | 8-719-941-86 | s DIODE DAN202U                |
| D15                 | 8-719-941-86 | s DIODE DAN202U                |
| D611                | 8-719-941-86 | s DIODE DAN202U                |
| D612                | 8-719-941-86 | s DIODE DAN202U                |
| D701                | 8-719-941-86 | s DIODE DAN202U                |
| D702                | 8-719-941-09 | s DIODE DAP202U                |
| D704                | 8-719-941-86 | s DIODE DAN202U                |
| D705                | 8-719-941-86 | s DIODE DAN202U                |
| D706                | 8-719-941-86 | s DIODE DAN202U                |
| D707                | 8-719-941-86 | s DIODE DAN202U                |
| D800                | 8-719-941-86 | s DIODE DAN202U                |
| D801                | 8-719-941-86 | s DIODE DAN202U                |
| D802                | 8-719-104-10 | s DIODE 1SS99                  |
| D803                | 8-719-104-10 | s DIODE 1SS99                  |
| D804                | 8-719-941-86 | s DIODE DAN202U                |
| D805                | 8-719-941-86 | s DIODE DAN202U                |
| DL1                 | 1-415-403-21 | s DELAY LINE 1us               |
| FL2                 | 1-236-848-21 | s FILTER, LOW PASS 5.0MHz      |
| FL3                 | 1-239-010-11 | s FILTER, LOW PASS (CCD.PAL.Y) |
| FL5                 | 1-236-774-11 | s FILTER, LOW-PASS (Y)         |
| FL6                 | 1-236-850-21 | s FILTER, BAND PASS 4.43MHz    |
| FL7                 | 1-236-849-21 | s FILTER, BAND PASS 4.43MHz    |
| FL8                 | 1-577-162-11 | s FILTER, CERAMIC 5.17MHz      |
| FL9                 | 1-236-186-11 | s FILTER, BAND PASS 4.43MHz    |
| IC3                 | 8-759-998-32 | s IC CXD2107M                  |
| IC5                 | 8-759-925-60 | s IC BA401                     |
| IC6                 | 8-759-710-86 | s IC NJM2233BM                 |
| IC9                 | 8-759-710-86 | s IC NJM2233BM                 |
| IC10                | 8-759-710-86 | s IC NJM2233BM                 |
| IC12                | 8-752-015-81 | s IC CX20158                   |
| IC15                | 8-752-333-24 | s IC CXL1506M                  |
| IC16                | 8-752-333-24 | s IC CXL1506M                  |
| IC17                | 8-752-054-62 | s IC CXA1207AR                 |
| IC19                | 8-759-239-34 | s IC TC74HC4538AF              |
| IC20                | 8-759-605-61 | s IC CXA1203N                  |
| IC21                | 8-759-710-86 | s IC NJM2233BM                 |
| IC22                | 8-759-969-13 | s IC SN16913P                  |
| IC24                | 8-759-710-86 | s IC NJM2233BM                 |
| IC25                | 8-752-051-40 | s IC CXA1208R                  |
| IC26                | 8-759-925-74 | s IC TC74HC04NS                |
| IC27                | 8-759-708-05 | s IC NJM78L05A                 |
| IC28                | 8-759-700-65 | s IC NJM79L05A                 |
| IC31                | 8-759-925-74 | s IC TC74HC04NS                |
| IC611               | 8-759-009-51 | s IC MC14538BF                 |
| IC612               | 8-759-009-51 | s IC MC14538BF                 |
| IC701               | 8-759-710-86 | s IC NJM2233BM                 |
| IC702               | 8-759-925-90 | s IC SN74HC74NS                |
| IC800               | 8-759-206-28 | s IC TC74HC123F                |
| L1                  | 1-408-785-21 | s INDUCTOR CHIP 47uH           |
| L2                  | 1-410-387-11 | s INDUCTOR, CHIP 33uH          |
| L3                  | 1-412-280-31 | s INDUCTOR CHIP 330uH          |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description         |
|---------------------|--------------|------------------------|
| L4                  | 1-410-167-41 | s INDUCTOR CHIP 820uH  |
| L5                  | 1-410-657-21 | s INDUCTOR, CHIP 180uH |
| L6                  | 1-410-387-11 | s INDUCTOR, CHIP 33uH  |
| L7                  | 1-410-374-11 | s INDUCTOR, CHIP 2.7uH |
| L8                  | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L9                  | 1-410-378-11 | s INDUCTOR, CHIP 5.6uH |
| L10                 | 1-410-379-31 | s INDUCTOR CHIP 6.8uH  |
| L12                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L25                 | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L26                 | 1-410-383-31 | s INDUCTOR, CHIP 15uH  |
| L27                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L28                 | 1-410-384-31 | s INDUCTOR CHIP 18uH   |
| L29                 | 1-412-282-41 | s INDUCTOR, CHIP 470uH |
| L30                 | 1-412-282-41 | s INDUCTOR, CHIP 470uH |
| L31                 | 1-410-384-31 | s INDUCTOR CHIP 18uH   |
| L42                 | 1-410-385-41 | s INDUCTOR CHIP 22uH   |
| L43                 | 1-410-385-41 | s INDUCTOR CHIP 22uH   |
| L44                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L45                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L46                 | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L47                 | 1-410-384-31 | s INDUCTOR CHIP 18uH   |
| L48                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L49                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L56                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L57                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L61                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L62                 | 1-408-777-00 | s INDUCTOR, CHIP 10uH  |
| L63                 | 1-408-777-00 | s INDUCTOR, CHIP 10uH  |
| L64                 | 1-408-777-00 | s INDUCTOR, CHIP 10uH  |
| L65                 | 1-408-777-00 | s INDUCTOR, CHIP 10uH  |
| L66                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L67                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L68                 | 1-410-379-31 | s INDUCTOR CHIP 6.8uH  |
| L69                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L70                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L80                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L81                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L82                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L83                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L84                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L85                 | 1-412-282-41 | s INDUCTOR, CHIP 470uH |
| L86                 | 1-410-384-31 | s INDUCTOR CHIP 18uH   |
| L89                 | 1-408-789-21 | s INDUCTOR CHIP 100uH  |
| L90                 | 1-410-388-21 | s INDUCTOR, CHIP 39uH  |
| L91                 | 1-410-385-41 | s INDUCTOR CHIP 22uH   |
| L92                 | 1-410-386-11 | s INDUCTOR, CHIP 27uH  |
| L93                 | 1-408-789-21 | s INDUCTOR CHIP 100uH  |
| L94                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L95                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L98                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L99                 | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L611                | 1-410-387-11 | s INDUCTOR, CHIP 33uH  |
| L702                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L703                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L704                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L705                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L706                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L707                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L708                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |



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| Ref. No.<br>or Q'ty | Part No.     | SP Description            |
|---------------------|--------------|---------------------------|
| L709                | 1-410-655-31 | s INDUCTOR, CHIP 120uH    |
| L710                | 1-408-789-21 | s INDUCTOR CHIP 100uH     |
| L711                | 1-408-413-00 | s INDUCTOR 22uH           |
| Q1                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q2                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q3                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q4                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q5                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q6                  | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q7                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q8                  | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q9                  | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q10                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q11                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q12                 | 8-729-201-05 | s TRANSISTOR 2SC2878-B    |
| Q13                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q14                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q15                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q16                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q17                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q18                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q19                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q20                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q21                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q22                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q23                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q24                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q25                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q46                 | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q48                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q49                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q50                 | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q51                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q52                 | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q53                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q54                 | 8-729-903-10 | s TRANSISTOR FMW1         |
| Q55                 | 8-729-903-97 | s TRANSISTOR FMS1FE       |
| Q56                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q57                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q58                 | 8-729-903-10 | s TRANSISTOR FMW1         |
| Q70                 | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q71                 | 8-729-230-49 | s TRANSISTOR 2SC2712-YG   |
| Q72                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q73                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q74                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q75                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q76                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q77                 | 8-729-230-49 | s TRANSISTOR 2SC2712-YG   |
| Q78                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q80                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q81                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q82                 | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q83                 | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q84                 | 8-729-230-49 | s TRANSISTOR 2SC2712-YG   |
| Q101                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q102                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q103                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q104                | 8-729-905-18 | s TRANSISTOR DTC144EU     |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description            |
|---------------------|--------------|---------------------------|
| Q105                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q106                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q107                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q108                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q109                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q110                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q111                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q112                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q113                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q122                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q131                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q132                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q133                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q134                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q135                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q136                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q137                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q138                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q139                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q140                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q145                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q146                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q148                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG   |
| Q149                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q150                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q151                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG   |
| Q152                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q154                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q162                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q163                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q164                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q165                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13  |
| Q166                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q167                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q175                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q176                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q611                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q612                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q701                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q703                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q704                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q706                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q707                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q800                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q801                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q802                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q803                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |
| Q804                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q805                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q806                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q807                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q809                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q810                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q811                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q812                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q813                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q815                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q816                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q817                | 8-729-202-38 | s TRANSISTOR 2SC3326N     |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                 |
|---------------------|--------------|----|-----------------------------|
| Q818                | 8-729-905-18 | s  | TRANSISTOR DTC144EU         |
| Q819                | 8-729-901-01 | s  | TRANSISTOR DTC144EK         |
| Q820                | 8-729-901-01 | s  | TRANSISTOR DTC144EK         |
| Q821                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N         |
| R1                  | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R2                  | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R3                  | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W     |
| R5                  | 1-216-651-11 | s  | METAL, CHIP 1K 0.5% 1/10W   |
| R6                  | 1-216-065-00 | s  | METAL, CHIP 4.7K 5% 1/10W   |
| R7                  | 1-216-089-91 | s  | METAL, CHIP 47K 5% 1/10W    |
| R8                  | 1-216-631-11 | s  | METAL, CHIP 150 0.5% 1/10W  |
| R9                  | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R10                 | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R11                 | 1-216-055-00 | s  | METAL, CHIP 1.8K 5% 1/10W   |
| R12                 | 1-216-641-11 | s  | METAL, CHIP 390 0.5% 1/10W  |
| R13                 | 1-216-633-11 | s  | METAL, CHIP 180 0.5% 1/10W  |
| R14                 | 1-216-295-00 | s  | METAL, CHIP 0               |
| R15                 | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R16                 | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R17                 | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W    |
| R18                 | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W    |
| R19                 | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W     |
| R20                 | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W    |
| R21                 | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R22                 | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R23                 | 1-216-652-11 | s  | METAL, CHIP 1.1K 0.5% 1/10W |
| R24                 | 1-216-643-11 | s  | METAL, CHIP 470 0.5% 1/10W  |
| R25                 | 1-216-643-11 | s  | METAL, CHIP 470 0.5% 1/10W  |
| R26                 | 1-216-630-11 | s  | METAL, CHIP 130 0.5% 1/10W  |
| R27                 | 1-216-637-11 | s  | METAL, CHIP 270 0.5% 1/10W  |
| R28                 | 1-216-055-00 | s  | METAL, CHIP 1.8K 5% 1/10W   |
| R29                 | 1-216-025-00 | s  | METAL, CHIP 100 5% 1/10W    |
| R30                 | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R31                 | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R44                 | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R45                 | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R46                 | 1-216-295-00 | s  | METAL, CHIP 0               |
| R48                 | 1-216-047-00 | s  | METAL, CHIP 820 5% 1/10W    |
| R49                 | 1-216-025-00 | s  | METAL, CHIP 100 5% 1/10W    |
| R50                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R51                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R52                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R53                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R54                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R55                 | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W    |
| R105                | 1-216-065-00 | s  | METAL, CHIP 4.7K 5% 1/10W   |
| R106                | 1-216-065-00 | s  | METAL, CHIP 4.7K 5% 1/10W   |
| R107                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R108                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R109                | 1-216-051-00 | s  | METAL, CHIP 1.2K 5% 1/10W   |
| R110                | 1-216-637-11 | s  | METAL, CHIP 270 0.5% 1/10W  |
| R111                | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R112                | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W    |
| R113                | 1-216-651-11 | s  | METAL, CHIP 1K 0.5% 1/10W   |
| R114                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W     |
| R115                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W    |
| R116                | 1-216-089-91 | s  | METAL, CHIP 47K 5% 1/10W    |
| R117                | 1-216-089-91 | s  | METAL, CHIP 47K 5% 1/10W    |
| R118                | 1-216-648-11 | s  | METAL, CHIP 750 0.5% 1/10W  |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                  |
|---------------------|--------------|----|------------------------------|
| R119                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W      |
| R120                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R121                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R122                | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W     |
| R123                | 1-216-035-00 | s  | METAL, CHIP 270 5% 1/10W     |
| R125                | 1-216-631-11 | s  | METAL, CHIP 150 0.5% 1/10W   |
| R128                | 1-216-077-00 | s  | METAL, CHIP 15K 5% 1/10W     |
| R130                | 1-216-653-11 | s  | METAL, CHIP 1.2K 0.5% 1/10W  |
| R131                | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W     |
| R132                | 1-216-069-00 | s  | METAL, CHIP 6.8K 5% 1/10W    |
| R133                | 1-216-061-00 | s  | METAL, CHIP 3.3K 5% 1/10W    |
| R134                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R135                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R136                | 1-216-621-11 | s  | METAL, CHIP 56 0.5% 1/10W    |
| R137                | 1-216-639-11 | s  | METAL, CHIP 330 0.5% 1/10W   |
| R138                | 1-216-649-11 | s  | METAL, CHIP 820 0.5% 1/10W   |
| R139                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R140                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R141                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W      |
| R142                | 1-216-025-00 | s  | METAL, CHIP 100 5% 1/10W     |
| R143                | 1-216-069-00 | s  | METAL, CHIP 6.8K 5% 1/10W    |
| R144                | 1-216-083-00 | s  | METAL, CHIP 27K 5% 1/10W     |
| R198                | 1-216-089-91 | s  | METAL, CHIP 47K 5% 1/10W     |
| R199                | 1-216-643-11 | s  | METAL, CHIP 470 0.5% 1/10W   |
| R200                | 1-216-089-91 | s  | METAL, CHIP 47K 5% 1/10W     |
| R201                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R202                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W      |
| R205                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W      |
| R206                | 1-216-053-00 | s  | METAL, CHIP 1.5K 5% 1/10W    |
| R207                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R208                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R209                | 1-216-665-11 | s  | METAL, CHIP 3.9K 0.5% 1/10W  |
| R210                | 1-216-610-11 | s  | METAL, CHIP 20 0.50% 1/10W   |
| R211                | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W     |
| R212                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R213                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R214                | 1-216-041-00 | s  | METAL, CHIP 470 5% 1/10W     |
| R215                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R217                | 1-216-616-11 | s  | METAL, CHIP 36 0.50% 1/10W   |
| R218                | 1-216-617-11 | s  | METAL, CHIP 39 0.50% 1/10W   |
| R219                | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W     |
| R220                | 1-216-081-00 | s  | METAL, CHIP 22K 5% 1/10W     |
| R221                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R222                | 1-216-073-00 | s  | METAL, CHIP 10K 5% 1/10W     |
| R223                | 1-216-049-00 | s  | METAL, CHIP 1K 5% 1/10W      |
| R224                | 1-216-037-00 | s  | METAL, CHIP 330 5% 1/10W     |
| R225                | 1-216-651-11 | s  | METAL, CHIP 1K 0.5% 1/10W    |
| R227                | 1-216-053-00 | s  | METAL, CHIP 1.5K 5% 1/10W    |
| R229                | 1-216-061-00 | s  | METAL, CHIP 3.3K 5% 1/10W    |
| R230                | 1-216-061-00 | s  | METAL, CHIP 3.3K 5% 1/10W    |
| R231                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R232                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R233                | 1-216-665-11 | s  | METAL, CHIP 3.9K 0.5% 1/10W  |
| R234                | 1-216-672-91 | s  | METAL, CHIP 7.5K 0.50% 1/10W |
| R235                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R236                | 1-216-644-11 | s  | METAL, CHIP 510 0.5% 1/10W   |
| R237                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R238                | 1-216-057-91 | s  | METAL, CHIP 2.2K 5% 1/10W    |
| R240                | 1-216-061-00 | s  | METAL, CHIP 3.3K 5% 1/10W    |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R241                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R262                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R263                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R264                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R265                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R266                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R268                | 1-216-013-00 | s METAL, CHIP 33 5% 1/10W     |
| R299                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R300                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R301                | 1-216-095-00 | s METAL, CHIP 82K 5% 1/10W    |
| R303                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R304                | 1-216-091-00 | s METAL, CHIP 56K 5% 1/10W    |
| R305                | 1-216-649-11 | s METAL, CHIP 820 0.5% 1/10W  |
| R306                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R307                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R308                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R309                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R310                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R311                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R312                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R313                | 1-216-113-00 | s METAL, CHIP 470K 5% 1/10W   |
| R314                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R315                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R316                | 1-216-095-00 | s METAL, CHIP 82K 5% 1/10W    |
| R317                | 1-216-295-00 | s METAL, CHIP 0               |
| R318                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R319                | 1-216-091-00 | s METAL, CHIP 56K 5% 1/10W    |
| R320                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R321                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R322                | 1-216-661-11 | s METAL, CHIP 2.7K 0.5% 1/10W |
| R323                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R324                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R325                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R327                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W |
| R328                | 1-216-295-00 | s METAL, CHIP 0               |
| R329                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W    |
| R330                | 1-216-113-00 | s METAL, CHIP 470K 5% 1/10W   |
| R331                | 1-216-649-11 | s METAL, CHIP 820 0.5% 1/10W  |
| R332                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R333                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R334                | 1-216-636-11 | s METAL, CHIP 240 0.5% 1/10W  |
| R335                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R336                | 1-216-075-00 | s METAL, CHIP 12K 5% 1/10W    |
| R337                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R338                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R339                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R340                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R341                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W  |
| R342                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R343                | 1-216-664-11 | s METAL, CHIP 3.6K 0.5% 1/10W |
| R344                | 1-216-119-00 | s METAL, CHIP 820K 5% 1/10W   |
| R345                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R346                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R347                | 1-216-641-11 | s METAL, CHIP 390 0.5% 1/10W  |
| R348                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R349                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R350                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R351                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R352                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R353                | 1-216-641-11 | s METAL, CHIP 390 0.5% 1/10W  |
| R354                | 1-216-079-00 | s METAL, CHIP 18K 5% 1/10W    |
| R355                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R356                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R357                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R358                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W    |
| R359                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R360                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R361                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R362                | 1-216-638-11 | s METAL, CHIP 300 0.5% 1/10W  |
| R364                | 1-216-638-11 | s METAL, CHIP 300 0.5% 1/10W  |
| R365                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R366                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R393                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R394                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R395                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R396                | 1-216-663-11 | s METAL, CHIP 3.3K 0.5% 1/10W |
| R397                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R398                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R423                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R424                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R425                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R426                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R427                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R429                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R430                | 1-216-687-11 | s METAL, CHIP 33K 0.5% 1/10W  |
| R431                | 1-216-687-11 | s METAL, CHIP 33K 0.5% 1/10W  |
| R432                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R433                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R434                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R435                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R436                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R437                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R438                | 1-216-295-00 | s METAL, CHIP 0               |
| R439                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R440                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R441                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R442                | 1-216-071-00 | s METAL, CHIP 8.2K 5% 1/10W   |
| R443                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R444                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R445                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R446                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R447                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R448                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R449                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R450                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R451                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R452                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R453                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R454                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R456                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R457                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R458                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R459                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R460                | 1-216-628-11 | s METAL, CHIP 110 0.5% 1/10W  |
| R461                | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R462                | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R463                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R482                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R483                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R485                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R486                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R487                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R488                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R489                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R490                | 1-216-657-11 | s METAL, CHIP 1.8K 0.5% 1/10W |
| R493                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R495                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R496                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R497                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R498                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W |
| R499                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R500                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R501                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R502                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R503                | 1-216-295-00 | s METAL, CHIP 0               |
| R504                | 1-216-295-00 | s METAL, CHIP 0               |
| R505                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R506                | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W     |
| R507                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R508                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R509                | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W     |
| R510                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R511                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R512                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R513                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R514                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R515                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R516                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R517                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R518                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R519                | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W     |
| R522                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R523                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R524                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R526                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R527                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R549                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R550                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R551                | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W    |
| R552                | 1-216-055-00 | s METAL, CHIP 1.8K 5% 1/10W   |
| R553                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R554                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R555                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R556                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R557                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R558                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R559                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R560                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R561                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R562                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R573                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R576                | 1-216-295-00 | s METAL, CHIP 0               |
| R585                | 1-216-295-00 | s METAL, CHIP 0               |
| R586                | 1-216-295-00 | s METAL, CHIP 0               |
| R587                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R588                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R591                | 1-216-685-11 | s METAL, CHIP 27K 0.5% 1/10W  |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R611                | 1-216-106-00 | s METAL, CHIP 240K 5% 1/10W   |
| R612                | 1-216-106-00 | s METAL, CHIP 240K 5% 1/10W   |
| R613                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R615                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R616                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R617                | 1-216-638-11 | s METAL, CHIP 300 0.5% 1/10W  |
| R618                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R719                | 1-216-631-11 | s METAL, CHIP 150 0.5% 1/10W  |
| R720                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R721                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R723                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R724                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R728                | 1-216-295-00 | s METAL, CHIP 0               |
| R730                | 1-216-295-00 | s METAL, CHIP 0               |
| R732                | 1-216-295-00 | s METAL, CHIP 0               |
| R733                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R734                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R735                | 1-216-295-00 | s METAL, CHIP 0               |
| R736                | 1-216-295-00 | s METAL, CHIP 0               |
| R737                | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W  |
| R738                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R739                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R741                | 1-216-295-00 | s METAL, CHIP 0               |
| R742                | 1-216-071-00 | s METAL, CHIP 8.2K 5% 1/10W   |
| R744                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R745                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R746                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W    |
| R747                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R749                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R756                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R757                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R758                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R759                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R780                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R785                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R786                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R787                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R791                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R792                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R793                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R794                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R795                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R800                | 1-216-295-00 | s METAL, CHIP 0               |
| R801                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R803                | 1-216-080-00 | s METAL, CHIP 20K 5% 1/10W    |
| R804                | 1-216-295-00 | s METAL, CHIP 0               |
| R902                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R903                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R904                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R905                | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W  |
| R950                | 1-216-641-11 | s METAL, CHIP 390 0.5% 1/10W  |
| R951                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R952                | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W  |
| R954                | 1-216-295-00 | s METAL, CHIP 0               |
| R955                | 1-216-681-11 | s METAL, CHIP 18K 0.5% 1/10W  |
| R956                | 1-216-671-11 | s METAL, CHIP 6.8K 0.5% 1/10W |
| R957                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R958                | 1-216-649-11 | s METAL, CHIP 820 0.5% 1/10W  |
| R959                | 1-216-654-11 | s METAL, CHIP 1.3K 0.5% 1/10W |

## (DM-92 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R962                | 1-216-661-11 | s METAL, CHIP 2.7K 0.5% 1/10W |
| R963                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R964                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R965                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R966                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R967                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R968                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R970                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R971                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R972                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R973                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R975                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R976                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R977                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R978                | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W  |
| R983                | 1-249-429-11 | s CARBON 10K 5% 1/4W          |
| R984                | 1-249-437-11 | s CARBON 47K 5% 1/4W          |
| R985                | 1-249-429-11 | s CARBON 10K 5% 1/4W          |
| R986                | 1-249-429-11 | s CARBON 10K 5% 1/4W          |
| R987                | 1-249-437-11 | s CARBON 47K 5% 1/4W          |
| RV8                 | 1-238-800-11 | s RES, ADJ METAL 2K           |
| RV9                 | 1-238-800-11 | s RES, ADJ METAL 2K           |
| RV10                | 1-238-784-11 | s RES, ADJ METAL 1K           |
| RV11                | 1-238-787-11 | s RES, ADJ METAL 10K          |
| RV12                | 1-238-789-11 | s RES, ADJ, CERMET 50K        |
| RV13                | 1-238-803-11 | s RES, ADJ METAL 20K          |
| RV16                | 1-238-799-11 | s RES, ADJ METAL 1K           |
| RV17                | 1-238-802-11 | s RES, ADJ METAL 10K          |
| RV22                | 1-238-787-11 | s RES, ADJ METAL 10K          |
| RV26                | 1-241-261-41 | s RES, ADJ, CERMET 1K         |
| RV27                | 1-241-261-41 | s RES, ADJ, CERMET 1K         |
| RV28                | 1-238-784-11 | s RES, ADJ METAL 1K           |
| RV702               | 1-238-799-11 | s RES, ADJ METAL 1K           |
| RV703               | 1-228-459-00 | s RES, ADJ METAL 10K          |
| TH101               | 1-808-269-11 | s THERMISTER                  |
| TH102               | 1-800-202-11 | s THERMISTOR S-10K            |
| X501                | 1-577-117-21 | s CRYSTAL 4.433619MHz         |

## DP-101 BOARD (Included DD-12 Board)

| Ref. No.<br>or Q'ty | Part No.     | SP Description |
|---------------------|--------------|----------------|
| D101                | 8-719-942-19 | s LED LB402VK  |
| D102                | 8-719-942-19 | s LED LB402VK  |
| D103                | 8-719-942-19 | s LED LB402VK  |
| D104                | 8-719-942-19 | s LED LB402VK  |

## DUS-613 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8276-574-A | o MOUNTED CIRCUIT BOARD, DUS-613 |
| C301                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C302                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C303                | 1-163-809-11 | s CERAMIC, CHIP 0.047uF 10% 25V  |
| C304                | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V    |
| C305                | 1-162-282-31 | s CERAMIC 100PF 10% 50V          |
| D301                | 8-719-400-18 | s DIODE MA152WK                  |
| IC302               | 8-759-925-90 | s IC SN74HC74NS                  |
| IC303               | 8-759-926-18 | s IC SN74HC157ANS                |
| IC304               | 8-759-925-90 | s IC SN74HC74NS                  |
| IC305               | 8-759-239-58 | s IC TC74HC221AF                 |
| IC306               | 8-759-926-18 | s IC SN74HC157ANS                |
| R301                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W       |
| R302                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W       |
| R303                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W       |
| R304                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W      |
| R305                | 1-216-101-00 | s METAL, CHIP 150K 5% 1/10W      |
| R306                | 1-247-867-11 | s CARBON 33K 5% 1/4W             |

## DUS-635 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | 1-647-742-11 | o PRINTED CIRCUIT BOARD, DUS-635 |
| C101                | 1-161-021-11 | s CERAMIC 0.047uF 10% 25V        |
| ICN101              | 1-526-816-21 | s SOCKET, IC (DP) 24P            |

## DUS-646 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | 1-648-231-11 | o PRINTED CIRCUIT BOARD, DUS-646 |
| C913                | 1-164-695-11 | s CERAMIC, CHIP 0.0022uF 5% 50V  |
| C914                | 1-164-004-11 | s CERAMIC, CHIP 0.1uF 10% 25V    |
| IC801               | 8-759-009-51 | s IC MC14538BF                   |
| R979                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W    |
| R980                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W    |

# DUS-662 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8276-658-A | o MOUNTED CIRCUIT BOARD, DUS-662 |
| C351                | 1-126-157-11 | s ELECT 10uF 20% 16V             |
| C352                | 1-161-051-00 | s CERAMIC 0.01uF 10% 50V         |
| C353                | 1-161-051-00 | s CERAMIC 0.01uF 10% 50V         |
| C354                | 1-161-051-00 | s CERAMIC 0.01uF 10% 50V         |
| C355                | 1-130-477-00 | s MYLAR 0.0033uF 5% 50V          |
| C356                | 1-130-477-00 | s MYLAR 0.0033uF 5% 50V          |
| C357                | 1-161-051-00 | s CERAMIC 0.01uF 10% 50V         |
| C358                | 1-161-051-00 | s CERAMIC 0.01uF 10% 50V         |
| IC351               | 1-526-816-21 | s SOCKET, IC (DP) 24P            |
| IC352               | 1-526-816-21 | s SOCKET, IC (DP) 24P            |
| IC353               | 8-759-917-11 | s IC SN74HC393AN                 |
| IC354               | 8-759-239-59 | s IC TC74HC221AP                 |
| R351                | 1-249-437-11 | s CARBON 47K 5% 1/4W             |
| RV351               | 1-228-462-00 | s RES, ADJ METAL 100K            |
| RV352               | 1-228-462-00 | s RES, ADJ METAL 100K            |

# DUS-693 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | 1-649-685-11 | o PRINTED CIRCUIT BOARD, DUS-693 |
| C918                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C919                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C920                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C921                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| C922                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V        |
| IC802               | 8-752-053-21 | s IC CXI1211M                    |
| R988                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W       |
| R989                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W       |

# DUS-699 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | 1-649-860-11 | o PRINTED CIRCUIT BOARD, DUS-699 |
| IC704               | 8-759-700-43 | s IC NJM4558M                    |
| R857                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W     |
| R858                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W     |
| R859                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W     |
| R860                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W     |

# FL-129P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8276-540-A | o MOUNTED CIRCUIT BOARD, FL-129P |
| C37                 | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C38                 | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C39                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C40                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C41                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C42                 | 1-163-145-00 | s CERAMIC, CHIP 0.0015uF 5% 50V  |
| C43                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C44                 | 1-162-924-11 | s CERAMIC 56PF 5% 50V            |
| C45                 | 1-162-928-11 | s CERAMIC, CHIP 120PF 5% 50V     |
| C46                 | 1-164-816-11 | s CERAMIC, CHIP 220PF 2% 50V     |
| C47                 | 1-162-959-11 | s CERAMIC, CHIP 330PF 5% 50V     |
| C48                 | 1-164-383-11 | s CERAMIC, CHIP 110PF 5% 50V     |
| C49                 | 1-164-392-11 | s CERAMIC, CHIP 390PF 5% 50V     |
| C50                 | 1-164-238-11 | s CERAMIC, CHIP 36PF 10% 50V     |
| C51                 | 1-164-466-11 | s CERAMIC, CHIP 240PF 5% 50V     |
| C52                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C54                 | 1-162-999-11 | s CERAMIC, CHIP 91PF 5% 50V      |
| C56                 | 1-164-393-11 | s CERAMIC, CHIP 430PF 5% 50V     |
| C59                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C60                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C62                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C63                 | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C64                 | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C65                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C66                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C67                 | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C68                 | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C69                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C70                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C72                 | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C74                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C457                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| IC4                 | 8-759-710-86 | s IC NJM2233BM                   |
| L13                 | 1-408-785-21 | s INDUCTOR CHIP 47uH             |
| L14                 | 1-408-785-21 | s INDUCTOR CHIP 47uH             |
| L15                 | 1-408-798-00 | s INDUCTOR, CHIP 1mmH            |
| L16                 | 1-410-389-31 | s INDUCTOR CHIP 47uH             |
| L17                 | 1-410-391-11 | s INDUCTOR, CHIP 68uH            |
| L18                 | 1-410-392-11 | s INDUCTOR, CHIP 82uH            |
| L19                 | 1-410-392-11 | s INDUCTOR, CHIP 82uH            |
| L23                 | 1-408-785-21 | s INDUCTOR CHIP 47uH             |
| Q26                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q27                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q28                 | 8-729-905-18 | s TRANSISTOR DTC144EU            |
| Q29                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q30                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q31                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q33                 | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| Q34                 | 8-729-202-38 | s TRANSISTOR 2SC3326N            |
| Q35                 | 8-729-202-38 | s TRANSISTOR 2SC3326N            |
| Q36                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q37                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q38                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q39                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q40                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q41                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |

(FL-129P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| Q42                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q43                 | 8-729-905-18 | s TRANSISTOR DTC144EU         |
| Q44                 | 8-729-905-18 | s TRANSISTOR DTC144EU         |
| R56                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R57                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R58                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R59                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W   |
| R60                 | 1-218-672-11 | s METAL, CHIP 150 0.50% 1/16W |
| R61                 | 1-218-457-11 | s METAL, CHIP 910 5% 1/16W    |
| R62                 | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R63                 | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W    |
| R64                 | 1-216-865-11 | s METAL, CHIP 3K 5% 1/16W     |
| R65                 | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W    |
| R66                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R67                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R69                 | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W    |
| R70                 | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R71                 | 1-218-457-11 | s METAL, CHIP 910 5% 1/16W    |
| R73                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R74                 | 1-218-457-11 | s METAL, CHIP 910 5% 1/16W    |
| R75                 | 1-218-457-11 | s METAL, CHIP 910 5% 1/16W    |
| R80                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R81                 | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R82                 | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R83                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R84                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R85                 | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R86                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R87                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R88                 | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R89                 | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W    |
| R90                 | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R91                 | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R92                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R93                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R94                 | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R95                 | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R96                 | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R98                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R99                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R100                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R101                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R104                | 1-218-289-11 | s METAL, CHIP 510 5% 1/16W    |
| R592                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R593                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R605                | 1-218-271-11 | s METAL, CHIP 2K 5% 1/16W     |
| R701                | 1-218-688-11 | s METAL, CHIP 680 0.50% 1/16W |
| R747                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R788                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R789                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| RV2                 | 1-241-261-41 | s RES, ADJ, CERMET 1K         |
| RV3                 | 1-241-261-41 | s RES, ADJ, CERMET 1K         |
| RV4                 | 1-241-262-11 | s RES, ADJ, CERMET 2K         |
| RV5                 | 1-241-262-11 | s RES, ADJ, CERMET 2K         |

FL-130P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8276-541-A | o MOUNTED CIRCUIT BOARD, FL-130P |
| C293                | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V      |
| C294                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C295                | 1-164-379-11 | s CERAMIC 43PF 5% 50V            |
| C296                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C297                | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C298                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| C299                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| C303                | 1-135-165-11 | s TANTALUM 33uF 20% 16V          |
| C304                | 1-135-165-11 | s TANTALUM 33uF 20% 16V          |
| C305                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C306                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C307                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C308                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C453                | 1-164-385-11 | s CERAMIC, CHIP 160PF 5% 50V     |
| C454                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C701                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| C702                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| C704                | 1-164-378-11 | s CERAMIC, CHIP 30PF 5% 50V      |
| CN7                 | 1-566-095-11 | o CONNECTOR, BB 11P, MALE        |
| CN8                 | 1-566-095-11 | o CONNECTOR, BB 11P, MALE        |
| CT1                 | 1-141-404-11 | s CAP, TRIMMER 30PF              |
| FL4                 | 1-236-716-11 | s FILTER, LOW-PASS 5MHz          |
| IC18                | 8-759-710-86 | s IC NJM2233BM                   |
| L52                 | 1-410-381-11 | s INDUCTOR CHIP 10uH             |
| L71                 | 1-410-388-31 | s INDUCTOR CHIP 39uH             |
| L72                 | 1-410-387-11 | s INDUCTOR, CHIP 33uH            |
| L73                 | 1-410-383-31 | s INDUCTOR, CHIP 15uH            |
| L701                | 1-410-390-11 | s INDUCTOR, CHIP 56uH            |
| Q114                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q115                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q116                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q117                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q118                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q119                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13         |
| Q120                | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| Q121                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q701                | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| Q702                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q703                | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| R367                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R368                | 1-218-706-11 | s METAL, CHIP 3.9K 0.50% 1/16W   |
| R369                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R370                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R371                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W        |
| R372                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W       |
| R373                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R374                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R375                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R376                | 1-218-700-11 | s METAL, CHIP 2.2K 0.50% 1/16W   |
| R377                | 1-218-295-11 | s METAL, CHIP 4.3K 5% 1/16W      |
| R379                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W      |
| R380                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W       |
| R381                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W       |
| R382                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W       |



## (FL-130P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R383                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R384                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R385                | 1-218-482-11 | s METAL, CHIP 430 5% 1/16W    |
| R387                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R388                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R389                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R391                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R392                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R590                | 1-218-727-11 | s METAL, CHIP 30K 0.50% 1/16W |
| R710                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R711                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R712                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R713                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R714                | 1-218-883-11 | s METAL, CHIP 33K 0.50 1/16W  |
| R715                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R716                | 1-218-688-11 | s METAL, CHIP 680 0.50% 1/16W |
| R718                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R747                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |

## FL-131P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8276-542-A | o MOUNTED CIRCUIT BOARD, FL-131P |
| C313                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C314                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C316                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C321                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C322                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C323                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C324                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C456                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V    |
| C724                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| C725                | 1-135-227-11 | s TANTAL 100uF 20% 6.3V          |
| CN9                 | 1-566-095-11 | o CONNECTOR, BB 11P, MALE        |
| CN10                | 1-566-095-11 | o CONNECTOR, BB 11P, MALE        |
| CT2                 | 1-141-404-11 | s CAP, TRIMMER 30PF              |
| L53                 | 1-410-381-11 | s INDUCTOR CHIP 10uH             |
| L77                 | 1-410-386-11 | s INDUCTOR, CHIP 27uH            |
| L709                | 1-410-385-41 | s INDUCTOR CHIP 22uH             |
| Q123                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q124                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| Q125                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q126                | 8-729-230-49 | s TRANSISTOR 2SC2712-YG          |
| Q127                | 8-729-102-07 | s TRANSISTOR 2SC2223-F13         |
| Q130                | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| Q708                | 8-729-905-24 | s TRANSISTOR 2SA1576-S           |
| Q709                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6        |
| R399                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R400                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W        |
| R401                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W       |
| R402                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R403                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W       |
| R404                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R405                | 1-218-700-11 | s METAL, CHIP 2.2K 0.50% 1/16W   |
| R406                | 1-218-704-11 | s METAL, CHIP 3.3K 0.50% 1/16W   |
| R407                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W       |
| R408                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W      |
| R409                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W       |
| R410                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W       |
| R412                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R413                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W        |
| R421                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W       |
| R422                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W      |
| R601                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W       |
| R750                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W      |
| R751                | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W         |
| R752                | 1-218-716-11 | s METAL, CHIP 10K 0.50% 1/16W    |
| R753                | 1-218-700-11 | s METAL, CHIP 2.2K 0.50% 1/16W   |
| R754                | 1-218-482-11 | s METAL, CHIP 430 5% 1/16W       |
| RV15                | 1-241-262-11 | s RES, ADJ, CERMET 2K            |

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FP-84 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| 1pc                 | A-7070-624-A | o MOUNTED CIRCUIT BOARD, FP-84 |

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FP-122 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-7070-625-A | o MOUNTED CIRCUIT BOARD, FP-122 |

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HP-52 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-875-12 | o PRINTED CIRCUIT BOARD, HP-52  |
| 1pc                 | 1-642-874-11 | o PRINTED CIRCUIT BOARD, VR-130 |
| C1                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| J1002               | 1-507-854-00 | s JACK, PHONE                   |
| CN242               | 1-506-482-11 | s CONNECTOR 3P, MALE            |
| R1                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R2                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R3                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R4                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R5                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R6                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R7                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| R8                  | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W      |
| RV1                 | 1-237-703-11 | s RES, VAR CARBON 2Kx2          |

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KY-217 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8271-230-A | o MOUNTED CIRCUIT BOARD, KY-217 |
| 1pc                 | 3-718-657-01 | o HOLDER, LED                   |
| BT1                 | 1-528-229-11 | o BATTERY, LITHIUM CR-2450      |
| C2                  | 1-163-104-00 | s CERAMIC, CHIP 30PF 5% 50V     |
| C3                  | 1-163-104-00 | s CERAMIC, CHIP 30PF 5% 50V     |
| C4                  | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C6                  | 1-126-176-11 | s ELECT 220uF 20% 10V           |
| C7                  | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C8                  | 1-125-513-11 | s DOUBLE LAYERS 0.047FARAD 5.5V |
| C9                  | 1-126-163-11 | s ELECT 4.7uF 20% 50V           |
| C10                 | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C11                 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C12                 | 1-163-104-00 | s CERAMIC, CHIP 30PF 5% 50V     |
| C13                 | 1-163-104-00 | s CERAMIC, CHIP 30PF 5% 50V     |
| C14                 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C15                 | 1-124-472-11 | s ELECT 470uF 20% 10V           |
| C16                 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C17                 | 1-126-163-11 | s ELECT 4.7uF 20% 50V           |
| C18                 | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C19                 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| CN701               | 1-506-487-11 | s CONNECTOR 8P, MALE            |
| CN702               | 1-506-471-11 | s CONNECTOR 6P, MALE            |
| CN703               | 1-506-491-11 | o CONNECTOR, 12P, MALE          |
| CN704               | 1-506-489-11 | o CONNECTOR 10P, MALE           |
| CN706               | 1-506-486-11 | s CONNECTOR 7P, MALE            |
| COP1                | 1-566-388-11 | s CONNECTOR 8P, MALE            |
| COR1                | 1-563-859-11 | s PLUG, SHORTING                |
| D1                  | 8-719-104-34 | s DIODE 1S2835                  |
| D9                  | 8-719-104-34 | s DIODE 1S2835                  |
| D10                 | 8-719-104-34 | s DIODE 1S2835                  |
| D11                 | 8-719-104-34 | s DIODE 1S2835                  |
| D13                 | 8-719-104-34 | s DIODE 1S2835                  |
| D14                 | 8-719-104-34 | s DIODE 1S2835                  |
| D15                 | 8-719-104-34 | s DIODE 1S2835                  |
| D17                 | 8-719-104-34 | s DIODE 1S2835                  |
| D19                 | 8-719-104-34 | s DIODE 1S2835                  |
| D23                 | 8-719-104-34 | s DIODE 1S2835                  |
| D24                 | 8-719-104-34 | s DIODE 1S2835                  |
| D25                 | 8-719-104-34 | s DIODE 1S2835                  |
| D26                 | 8-719-104-34 | s DIODE 1S2835                  |
| D29                 | 8-719-104-34 | s DIODE 1S2835                  |
| D30                 | 8-719-104-34 | s DIODE 1S2835                  |
| D45                 | 8-719-104-34 | s DIODE 1S2835                  |
| D48                 | 8-719-200-02 | s DIODE 10E2                    |
| D49                 | 8-719-800-76 | s DIODE 1SS226                  |
| D50                 | 8-719-800-76 | s DIODE 1SS226                  |
| D51                 | 8-719-800-76 | s DIODE 1SS226                  |
| D52                 | 8-719-800-76 | s DIODE 1SS226                  |
| D54                 | 8-719-800-76 | s DIODE 1SS226                  |
| D101                | 8-719-939-39 | s LED GL5HD8, RED               |
| D102                | 8-719-802-11 | s LED TLUG154, GRN              |
| D103                | 8-719-939-39 | s LED GL5HD8, RED               |
| D104                | 8-719-939-39 | s LED GL5HD8, RED               |
| D105                | 8-719-939-39 | s LED GL5HD8, RED               |
| D106                | 8-719-939-39 | s LED GL5HD8, RED               |
| D107                | 8-719-939-39 | s LED GL5HD8, RED               |

## (KY-217 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description            |
|---------------------|--------------|---------------------------|
| D108                | 8-719-939-39 | s LED GL5HD8, RED         |
| D109                | 8-719-939-39 | s LED GL5HD8, RED         |
| D110                | 8-719-939-39 | s LED GL5HD8, RED         |
| D111                | 8-719-939-39 | s LED GL5HD8, RED         |
| D112                | 8-719-939-39 | s LED GL5HD8, RED         |
| D113                | 8-719-939-39 | s LED GL5HD8, RED         |
| D114                | 8-719-820-28 | s LED TLG-256, GRN        |
| D115                | 8-719-820-28 | s LED TLG-256, GRN        |
| D116                | 8-719-939-39 | s LED GL5HD8, RED         |
| D117                | 8-719-802-11 | s LED TLUG154, GRN        |
| D118                | 8-719-939-39 | s LED GL5HD8, RED         |
| IC1                 | 8-759-072-57 | s IC M50747H-601FP        |
| IC4                 | 8-759-093-15 | s IC TD62104F             |
| IC6                 | 8-759-708-05 | s IC NJM78L05A            |
| IC7                 | 8-759-074-77 | s IC MB88201HPF-539N      |
| IC7                 | 8-759-074-77 | s IC MB88201HPF-539N      |
| L001                | 1-410-385-41 | s INDUCTOR CHIP 22uH      |
| Q2                  | 8-729-901-07 | s TRANSISTOR DTA124XK     |
| Q3                  | 8-729-901-07 | s TRANSISTOR DTA124XK     |
| Q4                  | 8-729-901-07 | s TRANSISTOR DTA124XK     |
| Q5                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q6                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q7                  | 8-729-901-07 | s TRANSISTOR DTA124XK     |
| Q15                 | 8-729-901-01 | s TRANSISTOR DTC144EK     |
| Q100                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q101                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q102                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q103                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q104                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q105                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q106                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q107                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q108                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q109                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q110                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q111                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q112                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q113                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q114                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q115                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q116                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q117                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q118                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q119                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q120                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q121                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q122                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q123                | 8-729-216-22 | s TRANSISTOR 2SA1162      |
| Q124                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| R8                  | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R9                  | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R10                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R11                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R12                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R13                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R14                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |
| R15                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W |

## (KY-217 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description               |
|---------------------|--------------|------------------------------|
| R16                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R17                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R18                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R19                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R20                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R21                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R22                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R23                 | 1-216-689-11 | s METAL, CHIP 39K 0.5% 1/10W |
| R24                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R25                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R26                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R27                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R28                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R29                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R30                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R31                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R32                 | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W    |
| R33                 | 1-216-059-00 | s METAL, CHIP 2.7K 5% 1/10W  |
| R34                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W   |
| R35                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W   |
| R36                 | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W  |
| R37                 | 1-216-059-00 | s METAL, CHIP 2.7K 5% 1/10W  |
| R38                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R39                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W   |
| R40                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W   |
| R41                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R44                 | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W   |
| R45                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W  |
| R48                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W   |
| R49                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R50                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W    |
| R51                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W    |
| R52                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W    |
| R53                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W    |
| R54                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R55                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R56                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R57                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R58                 | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W  |
| R73                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R75                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W   |
| R84                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R85                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R86                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W    |
| R87                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R88                 | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W  |
| R89                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R95                 | 1-216-023-00 | s METAL, CHIP 82 5% 1/10W    |
| R96                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R97                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W   |
| R98                 | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W    |
| R99                 | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W    |
| R100                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W   |
| R101                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R102                | 1-216-063-00 | s METAL, CHIP 3.9K 5% 1/10W  |
| R103                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W   |
| R104                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W   |
| R105                | 1-216-063-00 | s METAL, CHIP 3.9K 5% 1/10W  |
| R106                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W   |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C748                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C749                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C750                | 1-163-215-00 | s CERAMIC, CHIP 0.0027uF 5% 50V |
| C751                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C752                | 1-163-115-00 | s CERAMIC, CHIP 82PF 5% 50V     |
| C753                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C754                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C755                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C756                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C760                | 1-163-237-11 | s CERAMIC, CHIP 27PF 5% 50V     |
| C761                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C763                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C764                | 1-163-227-11 | s CERAMIC, CHIP 10PF 5% 50V     |
| C766                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C767                | 1-163-099-00 | s CERAMIC, CHIP 18PF 5% 50V     |
| C769                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C771                | 1-163-033-00 | s CERAMIC, CHIP 0.022uF 50V     |
| C772                | 1-163-033-00 | s CERAMIC, CHIP 0.022uF 50V     |
| C774                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C804                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C805                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C806                | 1-130-483-00 | s MYLAR 0.01uF 5% 50V           |
| CN11                | 1-506-485-11 | s CONNECTOR 6P, MALE            |
| CN605               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CN606               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| D1                  | 8-719-941-86 | s DIODE DAN202U                 |
| D3                  | 8-719-941-86 | s DIODE DAN202U                 |
| D4                  | 8-719-941-86 | s DIODE DAN202U                 |
| D241                | 8-719-800-76 | s DIODE 1SS226                  |
| D700                | 8-719-941-86 | s DIODE DAN202U                 |
| D701                | 8-719-941-86 | s DIODE DAN202U                 |
| D702                | 8-719-800-76 | s DIODE 1SS226                  |
| D703                | 8-719-941-86 | s DIODE DAN202U                 |
| D704                | 8-719-941-86 | s DIODE DAN202U                 |
| DL1                 | 1-415-403-21 | s DELAY LINE 1uS                |
| FL1                 | 1-235-779-11 | s FILTER, LOW-PASS 2.5MHz       |
| FL2                 | 1-236-716-11 | s FILTER, LOW-PASS 5MHz         |
| FL3                 | 1-236-835-11 | s FILTER, BANDPASS 4.43MHz      |
| FL4                 | 1-577-162-11 | s FILTER, CERAMIC 5.17MHz       |
| FL5                 | 1-236-186-11 | s FILTER, BAND PASS 4.43MHz     |
| IC1                 | 8-759-239-34 | s IC TC74HC4538AF               |
| IC2                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC3                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC4                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC5                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC6                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC7                 | 8-752-337-04 | s IC CXD1176Q                   |
| IC8                 | 8-752-342-61 | s IC CXD2105AQ                  |
| IC9                 | 8-752-054-62 | s IC CXA1207AR                  |
| IC10                | 8-752-051-40 | s IC CXA1208R                   |
| IC11                | 8-759-708-05 | s IC NJM78L05A                  |
| IC14                | 8-759-700-43 | s IC NJM4558M                   |
| IC700               | 8-759-239-34 | s IC TC74HC4538AF               |
| IC701               | 8-759-710-86 | s IC NJM2233BM                  |
| IC702               | 8-759-700-43 | s IC NJM4558M                   |
| IC703               | 8-759-710-86 | s IC NJM2233BM                  |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description            |
|---------------------|--------------|---------------------------|
| L1                  | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L2                  | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L3                  | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L4                  | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L5                  | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L8                  | 1-410-388-31 | s INDUCTOR CHIP 39uH      |
| L10                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L11                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L12                 | 1-410-388-31 | s INDUCTOR CHIP 39uH      |
| L13                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L14                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L15                 | 1-410-383-31 | s INDUCTOR, CHIP 15uH     |
| L16                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L17                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L18                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L19                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L20                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L21                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L22                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L23                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L24                 | 1-410-393-11 | s INDUCTOR CHIP 100uH     |
| L25                 | 1-410-385-41 | s INDUCTOR CHIP 22uH      |
| L26                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L27                 | 1-410-391-11 | s INDUCTOR, CHIP 68uH     |
| L28                 | 1-410-386-11 | s INDUCTOR, CHIP 27uH     |
| L29                 | 1-410-391-11 | s INDUCTOR, CHIP 68uH     |
| L30                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L45                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L46                 | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L47                 | 1-410-386-11 | s INDUCTOR, CHIP 27uH     |
| L501                | 1-410-658-31 | s INDUCTOR, CHIP 220uH    |
| L502                | 1-410-656-11 | s INDUCTOR CHIP 150uH     |
| L503                | 1-410-389-31 | s INDUCTOR CHIP 47uH      |
| L504                | 1-410-655-31 | s INDUCTOR, CHIP 120uH    |
| L505                | 1-412-280-31 | s INDUCTOR CHIP 330uH     |
| L506                | 1-410-380-31 | s INDUCTOR, CHIP 8.2uH    |
| L507                | 1-412-280-31 | s INDUCTOR CHIP 330uH     |
| L527                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L700                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L701                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L702                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L703                | 1-410-384-31 | s INDUCTOR CHIP 18uH      |
| L704                | 1-410-380-31 | s INDUCTOR, CHIP 8.2uH    |
| L705                | 1-410-382-31 | s INDUCTOR, CHIP 12uH     |
| L706                | 1-410-379-31 | s INDUCTOR CHIP 6.8uH     |
| L707                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L708                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L709                | 1-410-391-11 | s INDUCTOR, CHIP 68uH     |
| L710                | 1-410-387-11 | s INDUCTOR, CHIP 33uH     |
| L713                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L714                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L715                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| L716                | 1-408-785-21 | s INDUCTOR CHIP 47uH      |
| Q1                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q2                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q3                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q4                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q5                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description             |
|---------------------|--------------|----|-------------------------|
| Q6                  | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q7                  | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q8                  | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q9                  | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q10                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q11                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q12                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q13                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q14                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q17                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q18                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q19                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q20                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q21                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q22                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q23                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q24                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q25                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q26                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q27                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q28                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q29                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q30                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q31                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q32                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q33                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q34                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q35                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q36                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q37                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q38                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q39                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q40                 | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q41                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q42                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q43                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q44                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q45                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q46                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q47                 | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q48                 | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q51                 | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q52                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q54                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q55                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q56                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q57                 | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q58                 | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q75                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q76                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q77                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q78                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q79                 | 8-729-117-16 | s  | TRANSISTOR 2SA1611-M6   |
| Q80                 | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q81                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q82                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q83                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q84                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q85                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description             |
|---------------------|--------------|----|-------------------------|
| Q86                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q87                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q88                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q89                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q90                 | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q91                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q92                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q93                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q94                 | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q95                 | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q241                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q242                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q243                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q244                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q245                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q246                | 8-729-903-82 | s  | TRANSISTOR FMW2         |
| Q501                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q503                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q504                | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q505                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q506                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q507                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q508                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q509                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q510                | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q700                | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q701                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q702                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q703                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q704                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q705                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q706                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q707                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q708                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q709                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q710                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q711                | 8-729-905-18 | s  | TRANSISTOR DTC144EU     |
| Q712                | 8-729-905-12 | s  | TRANSISTOR DTA144EU     |
| Q715                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q716                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q717                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q718                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q719                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q720                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q721                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q722                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q723                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q724                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q725                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q726                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q727                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q728                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q729                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q731                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q732                | 8-729-905-24 | s  | TRANSISTOR 2SA1576-S    |
| Q733                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |
| Q734                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q735                | 8-729-202-38 | s  | TRANSISTOR 2SC3326N     |
| Q736                | 8-729-120-28 | s  | TRANSISTOR 2SC1623-L5L6 |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| Q737                | 8-729-905-12 | s TRANSISTOR DTA144EU         |
| Q750                | 8-729-905-12 | s TRANSISTOR DTA144EU         |
| Q751                | 8-729-905-12 | s TRANSISTOR DTA144EU         |
| Q752                | 8-729-905-12 | s TRANSISTOR DTA144EU         |
| Q753                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q754                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q755                | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q756                | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q758                | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| R1                  | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R2                  | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R3                  | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R4                  | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R5                  | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R6                  | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R7                  | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R8                  | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R9                  | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R10                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R11                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R12                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R13                 | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R14                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R15                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R16                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R17                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R18                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R19                 | 1-216-105-91 | s METAL, CHIP 220K 5% 1/10W   |
| R21                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R23                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R24                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R25                 | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R26                 | 1-216-637-11 | s METAL, CHIP 270 0.5% 1/10W  |
| R27                 | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R28                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R29                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R31                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R32                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R33                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R34                 | 1-216-665-11 | s METAL, CHIP 3.9K 0.5% 1/10W |
| R35                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R36                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R37                 | 1-216-639-11 | s METAL, CHIP 330 0.5% 1/10W  |
| R38                 | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R39                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R40                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R41                 | 1-216-001-00 | s METAL, CHIP 10 5% 1/10W     |
| R42                 | 1-216-620-91 | s METAL, CHIP 51 0.50% 1/10W  |
| R43                 | 1-216-630-11 | s METAL, CHIP 130 0.5% 1/10W  |
| R45                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R50                 | 1-216-638-11 | s METAL, CHIP 300 0.5% 1/10W  |
| R52                 | 1-216-638-11 | s METAL, CHIP 300 0.5% 1/10W  |
| R53                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R55                 | 1-216-660-11 | s METAL, CHIP 2.4K 0.5% 1/10W |
| R56                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R57                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R58                 | 1-216-660-11 | s METAL, CHIP 2.4K 0.5% 1/10W |
| R59                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R60                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R61                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R62                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R63                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R64                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R65                 | 1-216-047-00 | s METAL, CHIP 820 5% 1/10W    |
| R66                 | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R67                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R73                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R74                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R75                 | 1-216-674-11 | s METAL, CHIP 9.1K 0.5% 1/10W |
| R76                 | 1-216-644-11 | s METAL, CHIP 510 0.5% 1/10W  |
| R77                 | 1-216-644-11 | s METAL, CHIP 510 0.5% 1/10W  |
| R78                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R79                 | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R80                 | 1-216-648-11 | s METAL, CHIP 750 0.5% 1/10W  |
| R82                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R83                 | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R84                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R89                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R90                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R91                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R92                 | 1-216-697-11 | s METAL, CHIP 82K 0.5% 1/10W  |
| R93                 | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R94                 | 1-216-664-11 | s METAL, CHIP 3.6K 0.5% 1/10W |
| R95                 | 1-216-664-11 | s METAL, CHIP 3.6K 0.5% 1/10W |
| R96                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R97                 | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R98                 | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W    |
| R99                 | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R100                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R101                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R102                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R103                | 1-216-637-11 | s METAL, CHIP 270 0.5% 1/10W  |
| R104                | 1-216-295-00 | s METAL, CHIP 0               |
| R105                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R106                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R107                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R108                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R109                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W    |
| R110                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W    |
| R111                | 1-216-637-11 | s METAL, CHIP 270 0.5% 1/10W  |
| R112                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W |
| R113                | 1-216-013-00 | s METAL, CHIP 33 5% 1/10W     |
| R114                | 1-216-017-00 | s METAL, CHIP 47 5% 1/10W     |
| R115                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W    |
| R116                | 1-216-067-91 | s METAL, CHIP 5.6K 5% 1/10W   |
| R117                | 1-216-671-11 | s METAL, CHIP 6.8K 0.5% 1/10W |
| R118                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R119                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R120                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R121                | 1-216-075-00 | s METAL, CHIP 12K 5% 1/10W    |
| R122                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R123                | 1-216-079-00 | s METAL, CHIP 18K 5% 1/10W    |
| R124                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R125                | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W |
| R126                | 1-216-071-00 | s METAL, CHIP 8.2K 5% 1/10W   |
| R127                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R128                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R129                | 1-216-295-00 | s METAL, CHIP 0               |

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| Ref. No.<br>or Q'ty | Part No.       | SP Description               |
|---------------------|----------------|------------------------------|
| R130                | 1-216-057-91 s | METAL, CHIP 2.2K 5% 1/10W    |
| R131                | 1-216-653-11 s | METAL, CHIP 1.2K 0.5% 1/10W  |
| R132                | 1-216-663-11 s | METAL, CHIP 3.3K 0.5% 1/10W  |
| R133                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R134                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R135                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R137                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R139                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R140                | 1-216-295-00 s | METAL, CHIP 0                |
| R141                | 1-216-025-00 s | METAL, CHIP 100 5% 1/10W     |
| R143                | 1-216-295-00 s | METAL, CHIP 0                |
| R144                | 1-216-057-91 s | METAL, CHIP 2.2K 5% 1/10W    |
| R145                | 1-216-699-11 s | METAL, CHIP 100K 0.5% 1/10W  |
| R146                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R147                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R148                | 1-216-017-00 s | METAL, CHIP 47 5% 1/10W      |
| R149                | 1-216-673-91 s | METAL, CHIP 8.2K 0.50% 1/10W |
| R150                | 1-216-673-91 s | METAL, CHIP 8.2K 0.50% 1/10W |
| R152                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R153                | 1-216-669-11 s | METAL, CHIP 5.6K 0.5% 1/10W  |
| R154                | 1-216-658-11 s | METAL, CHIP 2K 0.5% 1/10W    |
| R155                | 1-216-013-00 s | METAL, CHIP 33 5% 1/10W      |
| R156                | 1-216-057-91 s | METAL, CHIP 2.2K 5% 1/10W    |
| R157                | 1-216-065-00 s | METAL, CHIP 4.7K 5% 1/10W    |
| R158                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R159                | 1-216-643-11 s | METAL, CHIP 470 0.5% 1/10W   |
| R160                | 1-216-643-11 s | METAL, CHIP 470 0.5% 1/10W   |
| R161                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R162                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R163                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R164                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R165                | 1-216-051-00 s | METAL, CHIP 1.2K 5% 1/10W    |
| R167                | 1-216-651-11 s | METAL, CHIP 1K 0.5% 1/10W    |
| R168                | 1-216-650-11 s | METAL, CHIP 910 0.5% 1/10W   |
| R169                | 1-216-644-11 s | METAL, CHIP 510 0.5% 1/10W   |
| R171                | 1-216-295-00 s | METAL, CHIP 0                |
| R172                | 1-216-627-11 s | METAL, CHIP 100 0.5% 1/10W   |
| R173                | 1-216-627-11 s | METAL, CHIP 100 0.5% 1/10W   |
| R175                | 1-216-041-00 s | METAL, CHIP 470 5% 1/10W     |
| R176                | 1-216-053-00 s | METAL, CHIP 1.5K 5% 1/10W    |
| R179                | 1-216-061-00 s | METAL, CHIP 3.3K 5% 1/10W    |
| R180                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R181                | 1-216-667-11 s | METAL, CHIP 4.7K 0.5% 1/10W  |
| R182                | 1-216-665-11 s | METAL, CHIP 3.9K 0.5% 1/10W  |
| R185                | 1-218-754-11 s | METAL, CHIP 120K 0.50% 1/10W |
| R187                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R188                | 1-218-760-11 s | METAL, CHIP 220K 0.5% 1/10W  |
| R189                | 1-216-663-11 s | METAL, CHIP 3.3K 0.5% 1/10W  |
| R190                | 1-216-667-11 s | METAL, CHIP 4.7K 0.5% 1/10W  |
| R191                | 1-216-630-11 s | METAL, CHIP 130 0.5% 1/10W   |
| R192                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R193                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R194                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R195                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R196                | 1-216-641-11 s | METAL, CHIP 390 0.5% 1/10W   |
| R197                | 1-216-643-11 s | METAL, CHIP 470 0.5% 1/10W   |
| R198                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R199                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R200                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description               |
|---------------------|----------------|------------------------------|
| R241                | 1-216-085-00 s | METAL, CHIP 33K 5% 1/10W     |
| R242                | 1-216-072-00 s | METAL, CHIP 9.1K 5% 1/10W    |
| R243                | 1-216-662-11 s | METAL, CHIP 3K 0.5% 1/10W    |
| R244                | 1-216-041-00 s | METAL, CHIP 470 5% 1/10W     |
| R245                | 1-216-057-91 s | METAL, CHIP 2.2K 5% 1/10W    |
| R246                | 1-216-079-00 s | METAL, CHIP 18K 5% 1/10W     |
| R247                | 1-216-069-00 s | METAL, CHIP 6.8K 5% 1/10W    |
| R248                | 1-216-646-11 s | METAL, CHIP 620 0.5% 1/10W   |
| R249                | 1-216-051-00 s | METAL, CHIP 1.2K 5% 1/10W    |
| R250                | 1-216-077-00 s | METAL, CHIP 15K 5% 1/10W     |
| R251                | 1-216-051-00 s | METAL, CHIP 1.2K 5% 1/10W    |
| R252                | 1-216-097-00 s | METAL, CHIP 100K 5% 1/10W    |
| R253                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R254                | 1-216-061-00 s | METAL, CHIP 3.3K 5% 1/10W    |
| R255                | 1-216-097-00 s | METAL, CHIP 100K 5% 1/10W    |
| R256                | 1-218-769-11 s | METAL, CHIP 510K 0.50% 1/10W |
| R272                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R273                | 1-216-659-11 s | METAL, CHIP 2.2K 0.5% 1/10W  |
| R274                | 1-216-025-00 s | METAL, CHIP 100 5% 1/10W     |
| R275                | 1-216-025-00 s | METAL, CHIP 100 5% 1/10W     |
| R276                | 1-216-033-00 s | METAL, CHIP 220 5% 1/10W     |
| R277                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R278                | 1-216-061-00 s | METAL, CHIP 3.3K 5% 1/10W    |
| R279                | 1-216-657-11 s | METAL, CHIP 1.8K 0.5% 1/10W  |
| R280                | 1-216-651-11 s | METAL, CHIP 1K 0.5% 1/10W    |
| R281                | 1-216-047-00 s | METAL, CHIP 820 5% 1/10W     |
| R282                | 1-216-025-00 s | METAL, CHIP 100 5% 1/10W     |
| R283                | 1-216-057-91 s | METAL, CHIP 2.2K 5% 1/10W    |
| R284                | 1-216-643-11 s | METAL, CHIP 470 0.5% 1/10W   |
| R285                | 1-216-051-00 s | METAL, CHIP 1.2K 5% 1/10W    |
| R286                | 1-216-041-00 s | METAL, CHIP 470 5% 1/10W     |
| R287                | 1-216-079-00 s | METAL, CHIP 18K 5% 1/10W     |
| R288                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R289                | 1-216-041-00 s | METAL, CHIP 470 5% 1/10W     |
| R291                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R292                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R293                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R294                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R295                | 1-216-081-00 s | METAL, CHIP 22K 5% 1/10W     |
| R296                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R297                | 1-216-097-00 s | METAL, CHIP 100K 5% 1/10W    |
| R298                | 1-216-089-91 s | METAL, CHIP 47K 5% 1/10W     |
| R299                | 1-216-097-00 s | METAL, CHIP 100K 5% 1/10W    |
| R300                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R301                | 1-216-073-00 s | METAL, CHIP 10K 5% 1/10W     |
| R302                | 1-216-077-00 s | METAL, CHIP 15K 5% 1/10W     |
| R303                | 1-216-061-00 s | METAL, CHIP 3.3K 5% 1/10W    |
| R304                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R305                | 1-216-049-00 s | METAL, CHIP 1K 5% 1/10W      |
| R306                | 1-216-295-00 s | METAL, CHIP 0                |
| R307                | 1-216-295-00 s | METAL, CHIP 0                |
| R308                | 1-216-295-00 s | METAL, CHIP 0                |
| R309                | 1-216-295-00 s | METAL, CHIP 0                |
| R311                | 1-216-295-00 s | METAL, CHIP 0                |
| R312                | 1-216-295-00 s | METAL, CHIP 0                |
| R313                | 1-216-295-00 s | METAL, CHIP 0                |
| R314                | 1-216-295-00 s | METAL, CHIP 0                |
| R315                | 1-216-295-00 s | METAL, CHIP 0                |
| R319                | 1-216-295-00 s | METAL, CHIP 0                |



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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R320                | 1-216-295-00 | s METAL, CHIP 0               |
| R321                | 1-216-295-00 | s METAL, CHIP 0               |
| R322                | 1-216-295-00 | s METAL, CHIP 0               |
| R323                | 1-216-295-00 | s METAL, CHIP 0               |
| R324                | 1-216-295-00 | s METAL, CHIP 0               |
| R325                | 1-216-295-00 | s METAL, CHIP 0               |
| R326                | 1-216-295-00 | s METAL, CHIP 0               |
| R329                | 1-216-295-00 | s METAL, CHIP 0               |
| R331                | 1-216-642-11 | s METAL, CHIP 430 0.5% 1/10W  |
| R334                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R335                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R336                | 1-216-688-11 | s METAL, CHIP 36K 0.5% 1/10W  |
| R340                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R341                | 1-216-295-00 | s METAL, CHIP 0               |
| R342                | 1-216-109-91 | s METAL, CHIP 330K 5% 1/10W   |
| R343                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R344                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R345                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R348                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R350                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R351                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R352                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R353                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R354                | 1-216-686-11 | s METAL, CHIP 30K 0.5% 1/10W  |
| R355                | 1-216-665-11 | s METAL, CHIP 3.9K 0.5% 1/10W |
| R360                | 1-216-295-00 | s METAL, CHIP 0               |
| R361                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R364                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R365                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R501                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R502                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R504                | 1-216-663-11 | s METAL, CHIP 3.3K 0.5% 1/10W |
| R505                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R506                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R507                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R508                | 1-216-637-11 | s METAL, CHIP 270 0.5% 1/10W  |
| R509                | 1-216-637-11 | s METAL, CHIP 270 0.5% 1/10W  |
| R510                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R511                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R512                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R513                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R514                | 1-216-641-11 | s METAL, CHIP 390 0.5% 1/10W  |
| R515                | 1-216-079-00 | s METAL, CHIP 18K 5% 1/10W    |
| R516                | 1-216-671-11 | s METAL, CHIP 6.8K 0.5% 1/10W |
| R517                | 1-216-069-00 | s METAL, CHIP 6.8K 5% 1/10W   |
| R518                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R519                | 1-216-639-11 | s METAL, CHIP 330 0.5% 1/10W  |
| R520                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R521                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R522                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R523                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R524                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R525                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R526                | 1-216-627-11 | s METAL, CHIP 100 0.5% 1/10W  |
| R527                | 1-216-624-11 | s METAL, CHIP 75 0.5% 1/10W   |
| R528                | 1-216-295-00 | s METAL, CHIP 0               |
| R529                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R530                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R531                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R532                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W     |
| R533                | 1-216-295-00 | s METAL, CHIP 0                |
| R535                | 1-216-648-11 | s METAL, CHIP 750 0.5% 1/10W   |
| R536                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R700                | 1-216-679-11 | s METAL, CHIP 15K 0.5% 1/10W   |
| R701                | 1-216-661-11 | s METAL, CHIP 2.7K 0.5% 1/10W  |
| R702                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W  |
| R703                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R704                | 1-216-665-11 | s METAL, CHIP 3.9K 0.5% 1/10W  |
| R705                | 1-216-687-11 | s METAL, CHIP 33K 0.5% 1/10W   |
| R706                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R707                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R708                | 1-216-672-91 | s METAL, CHIP 7.5K 0.50% 1/10W |
| R709                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R710                | 1-216-059-00 | s METAL, CHIP 2.7K 5% 1/10W    |
| R711                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R712                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R714                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R715                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W     |
| R716                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R717                | 1-216-682-11 | s METAL, CHIP 20K 0.5% 1/10W   |
| R718                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R719                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R720                | 1-216-642-11 | s METAL, CHIP 430 0.5% 1/10W   |
| R721                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R722                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R723                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R724                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R725                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R726                | 1-216-647-11 | s METAL, CHIP 680 0.5% 1/10W   |
| R727                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W     |
| R728                | 1-216-661-11 | s METAL, CHIP 2.7K 0.5% 1/10W  |
| R729                | 1-216-685-11 | s METAL, CHIP 27K 0.5% 1/10W   |
| R730                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R731                | 1-216-682-11 | s METAL, CHIP 20K 0.5% 1/10W   |
| R732                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R733                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R734                | 1-216-642-11 | s METAL, CHIP 430 0.5% 1/10W   |
| R735                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R736                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R737                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R738                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R739                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W    |
| R740                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W    |
| R741                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R742                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R743                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R744                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R745                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R746                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W  |
| R747                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R749                | 1-216-657-11 | s METAL, CHIP 1.8K 0.5% 1/10W  |
| R751                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R752                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R753                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W  |
| R754                | 1-216-664-11 | s METAL, CHIP 3.6K 0.5% 1/10W  |
| R755                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R756                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R762                | 1-216-013-00 | s METAL, CHIP 33 5% 1/10W      |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R763                | 1-216-013-00 | s METAL, CHIP 33 5% 1/10W     |
| R764                | 1-216-031-00 | s METAL, CHIP 180 5% 1/10W    |
| R765                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R766                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R768                | 1-216-621-11 | s METAL, CHIP 56 0.5% 1/10W   |
| R769                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R771                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R772                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R773                | 1-216-687-11 | s METAL, CHIP 33K 0.5% 1/10W  |
| R774                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R775                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R776                | 1-216-631-11 | s METAL, CHIP 150 0.5% 1/10W  |
| R777                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R779                | 1-216-295-00 | s METAL, CHIP 0               |
| R780                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R782                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R784                | 1-216-644-11 | s METAL, CHIP 510 0.5% 1/10W  |
| R785                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R786                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R787                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R788                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R789                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R790                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R792                | 1-216-644-11 | s METAL, CHIP 510 0.5% 1/10W  |
| R793                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |
| R794                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R795                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R796                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R797                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R798                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R799                | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W |
| R800                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R801                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R802                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R803                | 1-216-295-00 | s METAL, CHIP 0               |
| R804                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R805                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R807                | 1-216-295-00 | s METAL, CHIP 0               |
| R808                | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R810                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R812                | 1-216-644-11 | s METAL, CHIP 510 0.5% 1/10W  |
| R813                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R814                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R815                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R816                | 1-216-295-00 | s METAL, CHIP 0               |
| R817                | 1-216-650-11 | s METAL, CHIP 910 0.5% 1/10W  |
| R818                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R819                | 1-216-295-00 | s METAL, CHIP 0               |
| R820                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R821                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R822                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R823                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R824                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R825                | 1-216-645-11 | s METAL, CHIP 560 0.5% 1/10W  |
| R826                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R827                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R828                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R829                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R833                | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W  |

## (MD-89 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R850                | 1-216-045-00 | s METAL, CHIP 680 5% 1/10W  |
| R851                | 1-216-045-00 | s METAL, CHIP 680 5% 1/10W  |
| R852                | 1-216-045-00 | s METAL, CHIP 680 5% 1/10W  |
| R853                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W  |
| R854                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W |
| R855                | 1-216-295-00 | s METAL, CHIP 0             |
| R856                | 1-216-295-00 | s METAL, CHIP 0             |
| RV1                 | 1-238-798-11 | s RES, ADJ METAL 500        |
| RV2                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV3                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV4                 | 1-238-803-11 | s RES, ADJ METAL 20K        |
| RV5                 | 1-238-803-11 | s RES, ADJ METAL 20K        |
| RV6                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV7                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV8                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV10                | 1-238-804-11 | s RES, ADJ METAL 50K        |
| RV13                | 1-238-799-11 | s RES, ADJ METAL 1K         |
| RV14                | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV15                | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV16                | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV17                | 1-238-799-11 | s RES, ADJ METAL 1K         |
| RV18                | 1-238-807-11 | s RES, ADJ METAL 500K       |
| RV700               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV702               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV703               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV704               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV705               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV706               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV707               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| RV708               | 1-238-800-11 | s RES, ADJ METAL 2K         |
| X1                  | 1-577-117-21 | s CRYSTAL 4.433619MHz       |

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MS-36 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| 1pc                 | A-7071-498-A | o MOUNTED CIRCUIT BOARD, MS-36 |
| 1pc                 | 1-163-038-11 | s CAP, CHIP CERAMIC 0.1MF 25V  |
| 1pc                 | 1-506-485-11 | o PIN, CONNECTOR, 6P           |

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MT-57A BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8271-224-A | o MOUNTED CIRCUIT BOARD, MT-57A |
| 2pcs                | 1-520-506-11 | s METER, AUDIO LEVEL            |
| 2pcs                | 3-738-923-01 | o HOLDER, LED                   |
| CN802               | 1-506-483-21 | s CONNECTOR, 4P, MALE           |
| D1                  | 8-719-820-27 | s LED TLY-256, YEL              |
| D2                  | 8-719-820-27 | s LED TLY-256, YEL              |
| D3                  | 8-719-820-27 | s LED TLY-256, YEL              |
| D4                  | 8-719-820-27 | s LED TLY-256, YEL              |
| R1                  | 1-249-411-11 | s CARBON 330 5% 1/4W            |
| R2                  | 1-249-411-11 | s CARBON 330 5% 1/4W            |

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PD-62 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8271-713-A | o MOUNTED CIRCUIT BOARD, PD-62  |
| C101                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V |
| C102                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C103                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V |
| C104                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C105                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V |
| C106                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C107                | 1-135-211-11 | s TANTALUM, CHIP 6.8uF 20% 6.3V |
| C108                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C109                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C110                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C111                | 1-135-166-21 | s TANTALUM, CHIP 47uF 10% 10V   |
| C112                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| CN252               | 1-563-863-21 | o CONNECTOR, 26P, MALE          |
| IC101               | 8-759-175-99 | s IC CXD8370Q                   |
| IC102               | 8-752-331-00 | s IC CXK5864BM-12L              |
| IC103               | 8-752-331-00 | s IC CXK5864BM-12L              |
| IC104               | 8-759-926-77 | s IC SN74HC541NS                |
| IC105               | 8-759-926-77 | s IC SN74HC541NS                |
| IC106               | 8-759-926-77 | s IC SN74HC541NS                |
| L101                | 1-410-393-11 | s INDUCTOR CHIP 100uH           |
| L102                | 1-410-393-11 | s INDUCTOR CHIP 100uH           |
| L103                | 1-410-393-11 | s INDUCTOR CHIP 100uH           |
| L104                | 1-410-393-11 | s INDUCTOR CHIP 100uH           |
| R101                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R102                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R103                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R104                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R105                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R106                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R107                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R108                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R109                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R110                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R111                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R112                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R113                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R114                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R115                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R116                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R117                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R118                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R119                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R120                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R121                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R122                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |
| R123                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W      |

PRE-10P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8271-857-A | o MOUNTED CIRCUIT BOARD, PRE-10P |
| 1pc                 | 3-947-136-01 | o PLATE, SHIELD, RF              |
| 1pc                 | 7-682-947-01 | s SCREW +PSW 3x6                 |
| C1                  | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C2                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C3                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C4                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C5                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C6                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C7                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C8                  | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C9                  | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C11                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C12                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C13                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C14                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C15                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C16                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C17                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C18                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C19                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C20                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C21                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C22                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C23                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C24                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C25                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C27                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C28                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C29                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C30                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C31                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C32                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C34                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C35                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C36                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C37                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C38                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C39                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C40                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C41                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C42                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C43                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C44                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C45                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C46                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C47                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C48                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C49                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C51                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C52                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C53                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C54                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C55                 | 1-124-477-11 | s ELECT 47uF 20% 25V             |
| C56                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C57                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C58                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C59                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |

(PRE-10P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C62                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C63                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C64                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C65                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C66                 | 1-124-477-11 | s ELECT 47uF 20% 25V            |
| C67                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C68                 | 1-124-477-11 | s ELECT 47uF 20% 25V            |
| C70                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C71                 | 1-124-477-11 | s ELECT 47uF 20% 25V            |
| C72                 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C73                 | 1-124-477-11 | s ELECT 47uF 20% 25V            |
| C74                 | 1-124-477-11 | s ELECT 47uF 20% 25V            |
| C75                 | 1-164-378-11 | s CERAMIC, CHIP 30PF 5% 50V     |
| C76                 | 1-164-378-11 | s CERAMIC, CHIP 30PF 5% 50V     |
| C77                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C78                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C79                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C80                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C81                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C82                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C83                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C84                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C99                 | 1-163-037-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C100                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C101                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C102                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C103                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C104                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C105                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C106                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C107                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V     |
| C150                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C151                | 1-162-995-11 | s CERAMIC, CHIP 0.022uF 50V     |
| C152                | 1-164-816-11 | s CERAMIC, CHIP 220PF 2% 50V    |
| C153                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C158                | 1-162-924-11 | s CERAMIC 56PF 5% 50V           |
| C159                | 1-162-924-11 | s CERAMIC 56PF 5% 50V           |
| C201                | 1-162-910-11 | s CERAMIC, CHIP 5PF 50V         |
| C202                | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C203                | 1-107-208-00 | s MICA 18PF 5% 500V             |
| CN1                 | 1-506-472-11 | s CONNECTOR 7P, MALE            |
| CN511               | 1-506-480-11 | s CONNECTOR, 15P, MALE          |
| CN512               | 1-568-964-11 | s CONNECTOR, 6P, MALE           |
| CN513               | 1-566-761-11 | o CONNECTOR 6P, MALE            |
| CN514               | 1-564-001-11 | o CONNECTOR, 2P, MALE           |
| DL1                 | 1-415-162-21 | s DELAY LINE 50ns               |
| IC1                 | 8-752-030-66 | s IC CXA1077M                   |
| IC2                 | 8-759-923-63 | s IC TL592PS                    |
| IC3                 | 8-759-923-63 | s IC TL592PS                    |
| IC4                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC5                 | 8-759-710-86 | s IC NJM2233BM                  |
| IC6                 | 8-759-925-76 | s IC SN74HC08NS                 |
| IC7                 | 8-759-925-74 | s IC TC74HC04NS                 |
| IC8                 | 8-752-030-66 | s IC CXA1077M                   |
| IC9                 | 8-759-923-63 | s IC TL592PS                    |
| IC10                | 8-759-923-63 | s IC TL592PS                    |
| IC11                | 8-759-710-86 | s IC NJM2233BM                  |
| IC12                | 8-759-710-86 | s IC NJM2233BM                  |

## (PRE-10P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| IC13                | 8-759-923-63 | s IC TL592PS                  |
| IC14                | 8-759-710-86 | s IC NJM2233BM                |
| L1                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L2                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L3                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L4                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L5                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L6                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L7                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L8                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L9                  | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L10                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L11                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L12                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L13                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L14                 | 1-410-375-11 | s INDUCTOR, CHIP 3.3uH        |
| L15                 | 1-410-375-11 | s INDUCTOR, CHIP 3.3uH        |
| L16                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| L17                 | 1-408-785-21 | s INDUCTOR CHIP 47uH          |
| Q1                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q2                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q3                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q4                  | 8-729-905-24 | s TRANSISTOR 2SA1576-S        |
| Q5                  | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q6                  | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q7                  | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q8                  | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q9                  | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q10                 | 8-729-905-18 | s TRANSISTOR DTC144EU         |
| Q11                 | 8-729-905-24 | s TRANSISTOR 2SA1576-S        |
| Q12                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q13                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q14                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q15                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q16                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q17                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q18                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q19                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q20                 | 8-729-102-07 | s TRANSISTOR 2SC2223-F13      |
| Q21                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q22                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q23                 | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q24                 | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q25                 | 8-729-202-38 | s TRANSISTOR 2SC3326N         |
| Q150                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6     |
| Q201                | 8-729-109-44 | s TRANSISTOR 2SK94            |
| Q202                | 8-729-109-44 | s TRANSISTOR 2SK94            |
| Q203                | 8-729-901-06 | s TRANSISTOR DTA144EK         |
| Q204                | 8-729-901-01 | s TRANSISTOR DTC144EK         |
| R1                  | 1-218-735-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R2                  | 1-216-813-11 | s METAL, CHIP 220 5% 1/16W    |
| R3                  | 1-218-735-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R4                  | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R7                  | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R8                  | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R9                  | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R10                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R11                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |

## (PRE-10P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R12                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R13                 | 1-218-735-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R15                 | 1-218-735-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R19                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R20                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R21                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R22                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R23                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R26                 | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R27                 | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W   |
| R29                 | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W   |
| R30                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R31                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R32                 | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W |
| R33                 | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R34                 | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R35                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R36                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R37                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R38                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R39                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R40                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R42                 | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W |
| R43                 | 1-220-373-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R44                 | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W |
| R45                 | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W |
| R46                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R47                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R48                 | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W   |
| R49                 | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R50                 | 1-218-672-11 | s METAL, CHIP 150 0.50% 1/16W |
| R51                 | 1-220-373-11 | s METAL, CHIP 62K 0.50% 1/16W |
| R52                 | 1-218-270-11 | s METAL, CHIP 1.1K 5% 1/16W   |
| R53                 | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R54                 | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R55                 | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W |
| R56                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W   |
| R57                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W   |
| R58                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R59                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R60                 | 1-216-813-11 | s METAL, CHIP 220 5% 1/16W    |
| R61                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R62                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R65                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R66                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R67                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R68                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R69                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R70                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R71                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R73                 | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R77                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R78                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R79                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R80                 | 1-216-803-11 | s METAL, CHIP 33 5% 1/16W     |
| R81                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R86                 | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W      |
| R89                 | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R90                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |

## (PRE-10P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R91                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R92                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R94                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R95                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R96                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R97                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R99                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R101                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R102                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R104                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R105                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R106                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R107                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R108                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R109                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R110                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R111                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R112                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R113                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R114                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R115                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R116                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R150                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R151                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R152                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R153                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R154                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R155                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R156                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R157                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R160                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R161                | 1-249-429-11 | s CARBON 10K 5% 1/4W        |
| R201                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W   |
| R202                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W   |
| R203                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R204                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| RV1                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV2                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV3                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV4                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV5                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV6                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV7                 | 1-238-784-11 | s RES, ADJ METAL 1K         |
| RV8                 | 1-238-784-11 | s RES, ADJ METAL 1K         |

## PTC-32 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-564-026-00 | o CONTACT, FEMALE, AWG26-30     |
| 1pc                 | 1-622-638-11 | o PRINTED CIRCUIT BOARD, PTC-32 |
| C1                  | 1-124-228-11 | s ELECT 22uF 20% 10V            |
| CN4                 | 1-562-151-11 | s HOUSING, 6P                   |
| IC1                 | 8-719-939-50 | s PHOTOINTERRUPTER GP-1L52      |
| IC2                 | 8-719-939-50 | s PHOTOINTERRUPTER GP-1L52      |
| IC3                 | 8-719-940-86 | s PHOTOINTERRUPTER GP-1L53      |
| IC4                 | 8-719-939-50 | s PHOTOINTERRUPTER GP-1L52      |
| IC5                 | 8-759-133-90 | s IC UPC339C                    |

## RM-101 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-970-11 | o PRINTED CIRCUIT BOARD, RM-101 |
| CN1021              | 1-566-319-11 | o CONNECTOR, D-SUB 15P, MALE    |

## RM-122 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-971-11 | o PRINTED CIRCUIT BOARD, RM-122 |
| CN1022              | 1-563-770-11 | s CONNECTOR, D-SUB 9P, FEMALE   |

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RS-31 BOARD  
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| Ref. No.<br>or Q'ty | Part No.      | SP Description                    |
|---------------------|---------------|-----------------------------------|
| 1pc                 | A-7061-818-A  | o MOUNTED CIRCUIT BOARD, RS-31    |
| 1pc                 | 1-559-762-11  | o CABLE, FLAT 22P                 |
| 1pc                 | 3-712-410-01  | s HOLDER, RS                      |
| CN304               | 1-563-494-11  | o CONNECTOR, FPC 6P, FEMALE       |
| CN305               | 1-565-211-11  | o CONNECTOR, FPC (ZIF) 22P FEMALE |
| D320                | 8-719-800-76  | s DIODE 1SS226                    |
| D321                | 8-719-800-76  | s DIODE 1SS226                    |
| IC301               | 8-759-908-81  | s IC MB3763PF                     |
| IC302               | 8-759-908-81  | s IC MB3763PF                     |
| PH301               | 8-719-939-11  | s PHOTOINTERRUPTER GP-2S09-B      |
| PH302               | 8-719-939-11  | s PHOTOINTERRUPTER GP-2S09-B      |
| PH303               | 8-719-939-11  | s PHOTOINTERRUPTER GP-2S09-B      |
| PS301               | A1-532-727-11 | s LINK, IC 0.25A                  |
| Q301                | 8-729-805-25  | s TRANSISTOR 2SB1121-S            |
| Q302                | 8-729-216-22  | s TRANSISTOR 2SA1162              |
| Q303                | 8-729-216-22  | s TRANSISTOR 2SA1162              |
| Q304                | 8-729-216-22  | s TRANSISTOR 2SA1162              |
| Q305                | 8-729-901-01  | s TRANSISTOR DTC144EK             |
| Q306                | 8-729-901-01  | s TRANSISTOR DTC144EK             |
| Q307                | 8-729-901-01  | s TRANSISTOR DTC144EK             |
| R302                | 1-216-174-00  | s METAL CHIP 100 5% 1/8W          |
| R303                | 1-216-186-00  | s METAL 330 5% 1/8W               |

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SOPS-1031  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| 2pcs                | 1-543-060-00 | s BEAD, FERRITE             |
| 1pc                 | 1-543-923-11 | s BEAD, FERRITE             |
| 1pc                 | 2-625-950-01 | o HEAT SINK (HS-1030)       |
| 1pc                 | 2-626-077-01 | o TUBE                      |
| 1pc                 | 4-382-854-11 | s SCREW (M3x10), P, SW (+)  |
| C101                | 1-136-185-00 | s FILM 0.22uF 20% 250V      |
| C101                | 1-136-185-00 | s FILM 0.22uF 20% 250V      |
| C102                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C102                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C103                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C103                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C104                | 1-136-185-00 | s FILM 0.22uF 20% 250V      |
| C104                | 1-136-185-00 | s FILM 0.22uF 20% 250V      |
| C105                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C105                | 1-161-742-00 | s CERAMIC 0.0022uF 20% 400V |
| C106                | 1-125-738-11 | s ELECT 270uF 20% 250       |
| C107                | 1-125-738-11 | s ELECT 270uF 20% 250       |
| C108                | 1-136-205-11 | s FILM 0.022uF 5% 630       |
| C109                | 1-124-122-11 | s ELECT 100uF 20% 50V       |
| C110                | 1-124-907-11 | s ELECT 10uF 20% 50V        |
| C111                | 1-136-165-00 | s FILM 0.1uF 5% 50V         |
| C112                | 1-110-342-11 | s FILM 390PF 5% 50V         |
| C113                | 1-130-487-00 | s MYLAR 0.022uF 5% 50V      |
| C117                | 1-162-573-11 | s CERAMIC 100PF 10% 400V    |
| C117                | 1-162-573-11 | s CERAMIC 100PF 10% 400V    |
| C118                | 1-130-487-00 | s MYLAR 0.022uF 5% 50V      |
| C203                | 1-130-487-00 | s MYLAR 0.022uF 5% 50V      |
| C210                | 1-124-567-00 | s ELECT 1200uF 20% 10V      |
| C213                | 1-126-241-11 | s ELECT 1500uF 20% 16V      |
| C214                | 1-126-241-11 | s ELECT 1500uF 20% 16V      |
| C215                | 1-128-102-11 | s ELECT 1200uF 20% 16V      |
| C216                | 1-136-165-00 | s FILM 0.1uF 5% 50V         |
| C217                | 1-128-102-11 | s ELECT 1200uF 20% 16V      |
| C219                | 1-124-527-11 | s ELECT 8200uF 20% 6.3V     |
| C220                | 1-124-527-11 | s ELECT 8200uF 20% 6.3V     |
| C222                | 1-128-221-51 | s ELECT 2200uF 20% 6.3      |
| C223                | 1-136-165-00 | s FILM 0.1uF 5% 50V         |
| C225                | 1-124-604-00 | s ELECT 330uF 20% 10V       |
| C226                | 1-136-165-00 | s FILM 0.1uF 5% 50V         |
| C227                | 1-128-102-11 | s ELECT 1200uF 20% 16V      |
| C228                | 1-126-316-51 | s ELECT 470uF 20% 16V       |
| C229                | 1-136-165-00 | s FILM 0.1uF 5% 50V         |
| C231                | 1-130-487-00 | s MYLAR 0.022uF 5% 50V      |
| C232                | 1-130-483-00 | s MYLAR 0.01uF 5% 50V       |
| C233                | 1-124-477-11 | s ELECT 47uF 20% 25V        |
| CN101               | 1-565-395-11 | o PIN, CONNECTOR 3P         |
| CN201               | 1-564-210-00 | o CONNECTOR, IL-S 12P, MALE |
| CN202               | 1-564-706-11 | o PIN HEADER, STRAIGHT 4P   |
| D101                | 8-719-510-22 | s DIODE D3SB60              |
| D102                | 8-719-313-16 | s DIODE AU02A               |
| D103                | 8-719-313-16 | s DIODE AU02A               |
| D104                | 8-719-911-19 | s DIODE 1SS119              |
| D104                | 8-719-912-20 | s DIODE 1SS120              |
| D105                | 8-719-109-84 | s DIODE RD5.1ES-B1          |
| D105                | 8-719-109-85 | s DIODE RD5.1ES-B2          |
| D201                | 8-719-510-41 | s DIODE D10SC9M             |
| D202                | 8-719-510-39 | s DIODE D10LC20U            |
| D203                | 8-719-510-12 | s DIODE D10SC4M             |



(SOPS-1031 )

| Ref. No.<br>or Q'ty | Part No.     | SP Description             |
|---------------------|--------------|----------------------------|
| D205                | 8-719-510-73 | s DIODE S3L20UF4           |
| D206                | 8-719-510-73 | s DIODE S3L20UF4           |
| D207                | 8-719-911-19 | s DIODE 1SS119             |
| D207                | 8-719-912-20 | s DIODE 1SS120             |
| D209                | 8-719-911-19 | s DIODE 1SS119             |
| D209                | 8-719-912-20 | s DIODE 1SS120             |
| D210                | 8-719-110-30 | s DIODE RD12ESB1           |
| D210                | 8-719-110-31 | s DIODE RD12ESB2           |
| D211                | 8-719-109-90 | s DIODE RD5.6ES-B2         |
| D211                | 8-719-123-54 | s DIODE RD5.6ESL3          |
| IC101               | 8-759-520-23 | s IC FA5304P               |
| IC102               | 8-719-028-92 | s PHOTO COUPLER PS2652-P-V |
| IC102               | 8-719-159-90 | s PHOTO COUPLER PS2652-P   |
| IC103               | 8-719-028-92 | s PHOTO COUPLER PS2652-P-V |
| IC103               | 8-719-159-90 | s PHOTO COUPLER PS2652-P   |
| IC201               | 8-759-245-79 | s IC TA79005S              |
| IC202               | 8-759-604-43 | s IC M5F79M09L             |
| IC203               | 8-759-321-95 | s IC HA17431PA             |
| L101                | 1-421-915-11 | s FILTER, LINE             |
| L102                | 1-424-574-11 | s L.F.T                    |
| L201                | 1-424-255-41 | s COIL, CHOKE (MOLDE) 10uH |
| L202                | 1-424-255-41 | s COIL, CHOKE (MOLDE) 10uH |
| L203                | 1-424-255-41 | s COIL, CHOKE (MOLDE) 10uH |
| L204                | 1-424-255-41 | s COIL, CHOKE (MOLDE) 10uH |
| Q101                | 8-729-322-18 | s TRANSISTOR 2SK1402A      |
| Q201                | 8-729-900-80 | s TRANSISTOR DTC114ES      |
| R101                | 1-202-849-00 | s SOLID 820K 10% 1/2W      |
| R102                | 1-243-011-11 | s WIREWOUND 2.2 5% 5W      |
| R104                | 1-215-903-11 | s METAL 68K 5% 2W          |
| R105                | 1-215-903-11 | s METAL 68K 5% 2W          |
| R108                | 1-215-904-11 | s METAL 100K 5% 2W         |
| R109                | 1-215-904-11 | s METAL 100K 5% 2W         |
| R110                | 1-215-902-11 | s METAL 47K 5% 2W          |
| R111                | 1-215-902-11 | s METAL 47K 5% 2W          |
| R112                | 1-212-857-00 | s FUSIBLE 10 5% 1/4W       |
| R113                | 1-249-404-00 | s CARBON 82 5% 1/4W        |
| R114                | 1-249-441-11 | s CARBON 100K 5% 1/4W      |
| R115                | 1-249-397-11 | s CARBON 22 5% 1/4W        |
| R116                | 1-216-341-11 | s METAL 0.22 5% 1W         |
| R117                | 1-249-405-11 | s CARBON 100 5% 1/4W       |
| R118                | 1-247-903-00 | s CARBON 1M 5% 1/4W        |
| R119                | 1-249-417-11 | s CARBON 1K 5% 1/4W        |
| R120                | 1-249-404-00 | s CARBON 82 5% 1/4W        |
| R121                | 1-249-425-11 | s CARBON 4.7K 5% 1/4W      |
| R122                | 1-249-436-11 | s CARBON 39K 5% 1/4W       |
| R205                | 1-215-888-00 | s FILM 220 5% 2W           |
| R206                | 1-249-435-11 | s CARBON 33K 5% 1/4W       |
| R209                | 1-215-434-00 | s METAL 3.6K 1% 1/6W       |
| R211                | 1-249-427-11 | s CARBON 6.8K 5% 1/4W      |
| R212                | 1-215-427-00 | s METAL 1.8K 1% 1/6W       |
| R213                | 1-249-433-11 | s CARBON 22K 5% 1/4W       |
| R214                | 1-249-417-11 | s CARBON 1K 5% 1/4W        |
| R215                | 1-249-417-11 | s CARBON 1K 5% 1/4W        |
| R216                | 1-249-421-11 | s CARBON 2.2K 5% 1/4W      |
| R217                | 1-215-888-00 | s FILM 220 5% 2W           |
| RV201               | 1-237-500-21 | s RES, ADJ METAL 1K        |

(SOPS-1031 )

| Ref. No.<br>or Q'ty | Part No.     | SP Description           |
|---------------------|--------------|--------------------------|
| T101                | 1-450-841-11 | s TRANSFORMER, CONVERTER |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.      | SP Description            |
|---------------------|---------------|---------------------------|
| IC707               | 8-759-927-46  | s IC SN74HC00NS           |
| IC801               | 8-752-037-08  | s IC CXA1109M             |
| IC802               | 8-759-108-77  | s IC CX877                |
| IC803               | 8-759-100-95  | s IC UPC324G2             |
| IC804               | 8-759-981-82  | s IC RC3414M              |
| IC805               | 8-759-100-93  | s IC UPC393G2             |
| IC806               | 8-759-207-00  | s IC A7733F               |
| IC809               | 8-759-100-94  | s IC UPC358G2             |
| IC901               | 8-759-207-50  | s IC TA7745F              |
| IC902               | 8-759-100-95  | s IC UPC324G2             |
| IC903               | 8-759-925-66  | s IC BA6303F              |
| IC904               | 8-759-008-67  | s IC MC14066BF            |
| IC905               | 8-759-100-94  | s IC UPC358G2             |
| IC906               | 8-759-708-05  | s IC NJM78L05A            |
| IC1001              | 8-759-100-97  | s IC UPC339G2             |
| IC1002              | 8-759-700-43  | s IC NJM4558M             |
| IC1003              | 8-759-008-67  | s IC MC14066BF            |
| L101                | 1-410-386-11  | s INDUCTOR, CHIP 27uH     |
| L401                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| L601                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| L701                | 1-408-795-21  | s INDUCTOR CHIP 330uH     |
| L702                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| L703                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| L704                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| L705                | 1-410-381-11  | s INDUCTOR CHIP 10uH      |
| PS1                 | △1-532-679-00 | s LINK, IC 0.6A           |
| PS2                 | △1-532-637-00 | s LINK, IC 1.0A           |
| PS3                 | △1-532-675-00 | s LINK, IC 1.5A           |
| PS501               | △1-532-679-00 | s LINK, IC 0.6A           |
| PS701               | △1-532-679-00 | s LINK, IC 0.6A           |
| PS801               | △1-532-685-00 | s LINK, IC 0.6A           |
| Q1                  | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q2                  | 8-729-905-12  | s TRANSISTOR DTA144EU     |
| Q3                  | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q4                  | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q6                  | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q8                  | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q15                 | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q16                 | 8-729-114-43  | s TRANSISTOR 2SD1309      |
| Q17                 | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q18                 | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q19                 | 8-729-905-12  | s TRANSISTOR DTA144EU     |
| Q20                 | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q21                 | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q201                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q202                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q203                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q204                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q205                | 8-729-905-24  | s TRANSISTOR 2SA1576-S    |
| Q401                | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q402                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q403                | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q404                | 8-729-120-28  | s TRANSISTOR 2SC1623-L5L6 |
| Q405                | 8-729-901-01  | s TRANSISTOR DTC144EK     |
| Q501                | 8-729-905-18  | s TRANSISTOR DTC144EU     |
| Q502                | 8-729-905-12  | s TRANSISTOR DTA144EU     |
| Q503                | 8-729-905-18  | s TRANSISTOR DTC144EU     |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description            |
|---------------------|--------------|---------------------------|
| Q504                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q505                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q506                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q507                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q509                | 8-729-805-25 | s TRANSISTOR 2SB1121-S    |
| Q510                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q511                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q512                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q513                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q514                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q602                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q603                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q604                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q605                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q706                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q707                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q708                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q709                | 8-729-905-24 | s TRANSISTOR 2SA1576-S    |
| Q710                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q711                | 8-729-805-25 | s TRANSISTOR 2SB1121-S    |
| Q712                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q713                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q714                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q715                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q716                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q717                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q718                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q719                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q802                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q803                | 8-729-111-14 | s TRANSISTOR 2SA1385-Z-L  |
| Q804                | 8-729-111-14 | s TRANSISTOR 2SA1385-Z-L  |
| Q809                | 8-729-111-95 | s TRANSISTOR 2SC3518-ZL   |
| Q810                | 8-729-805-25 | s TRANSISTOR 2SB1121-S    |
| Q811                | 8-729-805-25 | s TRANSISTOR 2SB1121-S    |
| Q812                | 8-729-111-14 | s TRANSISTOR 2SA1385-Z-L  |
| Q813                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q814                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q815                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q816                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q817                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q818                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q819                | 8-729-101-73 | s TRANSISTOR 2SD992A      |
| Q901                | 8-729-807-33 | s TRANSISTOR 2SB1123-R    |
| Q902                | 8-729-807-33 | s TRANSISTOR 2SB1123-R    |
| Q903                | 8-729-807-33 | s TRANSISTOR 2SB1123-R    |
| Q904                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q905                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q906                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q907                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6 |
| Q908                | 8-729-905-61 | s TRANSISTOR DTC124EU     |
| Q909                | 8-729-905-57 | s TRANSISTOR DTA124EU     |
| Q950                | 8-729-903-97 | s TRANSISTOR FMS1FE       |
| Q951                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q952                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q953                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q954                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q955                | 8-729-905-18 | s TRANSISTOR DTC144EU     |
| Q956                | 8-729-905-12 | s TRANSISTOR DTA144EU     |
| Q957                | 8-729-905-12 | s TRANSISTOR DTA144EU     |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| Q958                | 8-729-905-18 | s TRANSISTOR DTC144EU       |
| R1                  | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R2                  | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R3                  | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R4                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R5                  | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R6                  | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R7                  | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R8                  | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R9                  | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R10                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R11                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R12                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R13                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R14                 | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R15                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R16                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R17                 | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R18                 | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W  |
| R19                 | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W  |
| R20                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R21                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R22                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R24                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R25                 | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W  |
| R26                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R27                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R28                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R29                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R30                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R31                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R32                 | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R33                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R34                 | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W |
| R35                 | 1-249-410-11 | s CARBON 270 5% 1/4W        |
| R36                 | 1-249-410-11 | s CARBON 270 5% 1/4W        |
| R37                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R38                 | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W  |
| R39                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R40                 | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R41                 | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W   |
| R42                 | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R43                 | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R44                 | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W   |
| R45                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R46                 | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R48                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R49                 | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W |
| R50                 | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W  |
| R51                 | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W  |
| R56                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R57                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R58                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R59                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R60                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R61                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R62                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R63                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R64                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R65                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R66                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R67                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R69                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R70                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R71                 | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W |
| R72                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R73                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R74                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R75                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R76                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R77                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R78                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R79                 | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R83                 | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R84                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R85                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R86                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R87                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R88                 | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R89                 | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R90                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R91                 | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R100                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R101                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R102                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R104                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R106                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W  |
| R107                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R108                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R109                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R111                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W  |
| R112                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R113                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W |
| R114                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R115                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R116                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R118                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R121                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R122                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R123                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R124                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R128                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R130                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R131                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R132                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R133                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R134                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R135                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R136                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R137                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R139                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R142                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R143                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R144                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R145                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R146                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R147                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |

(SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description               |
|---------------------|--------------|----|---------------------------|
| R223                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R225                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R226                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R227                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R228                | 1-216-837-11 | s  | METAL, CHIP 22K 5% 1/16W  |
| R229                | 1-216-837-11 | s  | METAL, CHIP 22K 5% 1/16W  |
| R230                | 1-216-845-11 | s  | METAL, CHIP 100K 5% 1/16W |
| R231                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R232                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R233                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R234                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R236                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R237                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R238                | 1-216-809-11 | s  | METAL, CHIP 100 5% 1/16W  |
| R239                | 1-216-837-11 | s  | METAL, CHIP 22K 5% 1/16W  |
| R240                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R241                | 1-216-845-11 | s  | METAL, CHIP 100K 5% 1/16W |
| R242                | 1-216-837-11 | s  | METAL, CHIP 22K 5% 1/16W  |
| R243                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R244                | 1-216-845-11 | s  | METAL, CHIP 100K 5% 1/16W |
| R245                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R246                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R247                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R248                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R249                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R250                | 1-216-809-11 | s  | METAL, CHIP 100 5% 1/16W  |
| R251                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R252                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R253                | 1-216-845-11 | s  | METAL, CHIP 100K 5% 1/16W |
| R254                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R255                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R256                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R257                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R258                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R259                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R260                | 1-216-864-11 | s  | METAL, CHIP 0 5% 1/16W    |
| R261                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R262                | 1-216-833-11 | s  | METAL, CHIP 10K 5% 1/16W  |
| R263                | 1-216-829-11 | s  | METAL, CHIP 4.7K 5% 1/16W |
| R265                | 1-216-845-11 | s  | METAL, CHIP 100K 5% 1/16W |
| R270                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R271                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R272                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R273                | 1-216-819-11 | s  | METAL, CHIP 680 5% 1/16W  |
| R274                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R275                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R276                | 1-216-829-11 | s  | METAL, CHIP 4.7K 5% 1/16W |
| R277                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R278                | 1-216-811-11 | s  | METAL, CHIP 150 5% 1/16W  |
| R279                | 1-216-805-11 | s  | METAL, CHIP 47 5% 1/16W   |
| R280                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R281                | 1-216-829-11 | s  | METAL, CHIP 4.7K 5% 1/16W |
| R282                | 1-216-829-11 | s  | METAL, CHIP 4.7K 5% 1/16W |
| R283                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R284                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R285                | 1-216-818-11 | s  | METAL, CHIP 560 5% 1/16W  |
| R286                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |
| R287                | 1-216-841-11 | s  | METAL, CHIP 47K 5% 1/16W  |
| R288                | 1-216-821-11 | s  | METAL, CHIP 1K 5% 1/16W   |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R289                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R290                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R291                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R292                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R293                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R294                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R295                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R296                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R297                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R298                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R299                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R301                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R302                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R305                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R307                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R308                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R309                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R310                | 1-216-037-00 | s METAL, CHIP 330 5% 1/10W  |
| R311                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R312                | 1-260-068-11 | s CARBON 2.2 5% 1/2W        |
| R350                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R351                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R352                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R353                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R354                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R355                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R356                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R357                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R358                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R359                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R360                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R361                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R362                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R363                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R364                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R365                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R366                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R367                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R374                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R375                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R376                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R377                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R378                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W  |
| R379                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R380                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R382                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R383                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R386                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R387                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W  |
| R388                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R401                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R402                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R403                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R404                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R405                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R406                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R407                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R408                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R409                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R410                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R411                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R412                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R413                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R414                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R415                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R416                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R417                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R419                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R420                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R421                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R422                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R423                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R424                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R425                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R426                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W |
| R427                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R428                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R429                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R430                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R431                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W |
| R432                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R434                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R435                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R436                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R437                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R438                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R439                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R440                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R441                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R442                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R443                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R444                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R445                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R446                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R447                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R448                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R449                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R450                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W |
| R451                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R452                | 1-216-823-11 | s METAL, CHIP 1.5K 5% 1/16W |
| R453                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R454                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R455                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R456                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W  |
| R457                | 1-216-851-11 | s METAL, CHIP 330K 5% 1/16W |
| R458                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W  |
| R459                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W |
| R460                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R461                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W |
| R462                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R463                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W |
| R464                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R465                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R474                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W |
| R475                | 1-216-844-11 | s METAL, CHIP 82K 5% 1/16W  |
| R476                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R477                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R478                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R479                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R480                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R481                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R482                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R483                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
|                     |              |                               |
| R485                | 1-216-851-11 | s METAL, CHIP 330K 5% 1/16W   |
| R486                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R490                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R493                | 1-249-492-11 | s CARBON 10K 5% 1/4W          |
| R501                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
|                     |              |                               |
| R502                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R503                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R504                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R505                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R506                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
|                     |              |                               |
| R507                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R508                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R509                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R510                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R511                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
|                     |              |                               |
| R512                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R514                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R515                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R518                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R519                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
|                     |              |                               |
| R520                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R521                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R522                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R523                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R524                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
|                     |              |                               |
| R525                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R526                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R527                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R528                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R529                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
|                     |              |                               |
| R530                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R531                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R533                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R534                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R535                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
|                     |              |                               |
| R536                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R537                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R541                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R542                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R543                | 1-218-733-11 | s METAL, CHIP 51K 0.50% 1/16W |
|                     |              |                               |
| R544                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R545                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R546                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R547                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R548                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
|                     |              |                               |
| R549                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R550                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R551                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R552                | 1-218-723-11 | s METAL, CHIP 20K 0.50% 1/16W |
| R553                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
|                     |              |                               |
| R554                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R555                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R556                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R557                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| R558                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R559                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R560                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R561                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R562                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
|                     |              |                             |
| R563                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R564                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R565                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R566                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R567                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
|                     |              |                             |
| R568                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R569                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R570                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R571                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R572                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
|                     |              |                             |
| R573                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R574                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R575                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R576                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R577                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
|                     |              |                             |
| R578                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R579                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R580                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W  |
| R581                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W  |
| R582                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W  |
|                     |              |                             |
| R583                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W |
| R584                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W  |
| R585                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W |
| R586                | 1-216-842-11 | s METAL, CHIP 56K 5% 1/16W  |
| R587                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W  |
|                     |              |                             |
| R588                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W  |
| R589                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R590                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R591                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R592                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
|                     |              |                             |
| R593                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R594                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
| R595                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R597                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R601                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W  |
|                     |              |                             |
| R602                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W   |
| R603                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R604                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R605                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R606                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W |
|                     |              |                             |
| R607                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W |
| R608                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W |
| R609                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R610                | 1-216-847-11 | s METAL, CHIP 150K 5% 1/16W |
| R611                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W |
|                     |              |                             |
| R612                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W  |
| R613                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W |
| R614                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W  |
| R615                | 1-216-851-11 | s METAL, CHIP 330K 5% 1/16W |
| R616                | 1-216-846-11 | s METAL, CHIP 120K 5% 1/16W |
|                     |              |                             |
| R617                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W  |
| R618                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W  |
| R619                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W  |
| R620                | 1-216-812-11 | s METAL, CHIP 180 5% 1/16W  |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R621                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W     |
| R622                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W    |
| R623                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R624                | 1-216-856-11 | s METAL, CHIP 820K 5% 1/16W   |
| R625                | 1-216-847-11 | s METAL, CHIP 150K 5% 1/16W   |
| R626                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W   |
| R627                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R628                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R629                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W    |
| R630                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R631                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R632                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R633                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R634                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R635                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R636                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R637                | 1-216-842-11 | s METAL, CHIP 56K 5% 1/16W    |
| R638                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R639                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W   |
| R640                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R641                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R642                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R643                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R645                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R646                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R647                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R648                | 1-218-272-11 | s METAL, CHIP 5.1K 5% 1/16W   |
| R649                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W   |
| R650                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R651                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R652                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R653                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R654                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R656                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R657                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W    |
| R658                | 1-218-727-11 | s METAL, CHIP 30K 0.50% 1/16W |
| R659                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W   |
| R660                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R661                | 1-216-846-11 | s METAL, CHIP 120K 5% 1/16W   |
| R662                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R663                | 1-216-854-11 | s METAL, CHIP 560K 5% 1/16W   |
| R664                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R665                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R668                | 1-216-854-11 | s METAL, CHIP 560K 5% 1/16W   |
| R669                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R670                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W   |
| R671                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W   |
| R674                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R675                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R676                | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W     |
| R705                | 1-216-836-11 | s METAL, CHIP 18K 5% 1/16W    |
| R706                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R707                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R708                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W    |
| R709                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W    |
| R710                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W    |
| R711                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W    |
| R712                | 1-216-812-11 | s METAL, CHIP 180 5% 1/16W    |
| R713                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R714                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R715                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R716                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R717                | 1-216-842-11 | s METAL, CHIP 56K 5% 1/16W     |
| R718                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R720                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R721                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W    |
| R722                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W    |
| R723                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R724                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R725                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R726                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R727                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R728                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R729                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W     |
| R730                | 1-216-857-11 | s METAL, CHIP 1M 5% 1/16W      |
| R731                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R732                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R733                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R734                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R735                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R736                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R737                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R738                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R739                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R740                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W     |
| R741                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W    |
| R742                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R743                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R744                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R745                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R746                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W     |
| R747                | 1-218-269-11 | s METAL, CHIP 360 5% 1/16W     |
| R748                | 1-216-813-11 | s METAL, CHIP 220 5% 1/16W     |
| R749                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W     |
| R750                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R751                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W     |
| R752                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R753                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R754                | 1-216-819-11 | s METAL, CHIP 680 5% 1/16W     |
| R755                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R756                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R757                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R758                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R759                | 1-216-807-11 | s METAL, CHIP 68 5% 1/16W      |
| R801                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W    |
| R802                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W    |
| R803                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W    |
| R804                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W    |
| R805                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R806                | 1-216-806-11 | s METAL, CHIP 56 5% 1/16W      |
| R807                | 1-218-676-11 | s METAL, CHIP 220 0.50% 1/16W  |
| R808                | 1-218-707-11 | s METAL, CHIP 4.3K 0.50% 1/16W |
| R809                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R810                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R811                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R812                | 1-218-720-11 | s METAL, CHIP 15K 0.50% 1/16W  |
| R813                | 1-218-720-11 | s METAL, CHIP 15K 0.50% 1/16W  |
| R814                | 1-218-751-11 | s METAL, CHIP 300K 0.50% 1/16W |



## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R815                | 1-218-751-11 | s METAL, CHIP 300K 0.50% 1/16W |
| R816                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W     |
| R817                | 1-216-845-11 | s METAL, CHIP 100K 5% 1/16W    |
| R818                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W     |
| R819                | 1-218-744-11 | s METAL, CHIP 150K 0.50% 1/16W |
| R820                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W     |
| R821                | 1-216-850-11 | s METAL, CHIP 270K 5% 1/16W    |
| R822                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W     |
| R823                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W     |
| R824                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R825                | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
| R826                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R827                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R828                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R829                | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W     |
| R830                | 1-216-847-11 | s METAL, CHIP 150K 5% 1/16W    |
| R831                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R833                | 1-216-851-11 | s METAL, CHIP 330K 5% 1/16W    |
| R834                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W    |
| R835                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R837                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R838                | 1-216-849-11 | s METAL, CHIP 220K 5% 1/16W    |
| R839                | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W     |
| R840                | 1-216-850-11 | s METAL, CHIP 270K 5% 1/16W    |
| R841                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R842                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R843                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R844                | 1-216-850-11 | s METAL, CHIP 270K 5% 1/16W    |
| R845                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R846                | 1-216-850-11 | s METAL, CHIP 270K 5% 1/16W    |
| R847                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R848                | 1-216-850-11 | s METAL, CHIP 270K 5% 1/16W    |
| R849                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R850                | 1-218-296-11 | s METAL, CHIP 75K 5% 1/16W     |
| R853                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R854                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R855                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R864                | 1-216-813-11 | s METAL, CHIP 220 5% 1/16W     |
| R901                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W     |
| R902                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W     |
| R903                | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W     |
| R904                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R905                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R906                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R907                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W    |
| R908                | 1-216-810-11 | s METAL, CHIP 120 5% 1/16W     |
| R909                | 1-216-810-11 | s METAL, CHIP 120 5% 1/16W     |
| R910                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R911                | 1-216-853-11 | s METAL, CHIP 470K 5% 1/16W    |
| R912                | 1-216-831-11 | s METAL, CHIP 6.8K 5% 1/16W    |
| R913                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R916                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R917                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R918                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R919                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R920                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W     |
| R921                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W     |
| R922                | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W     |
| R923                | 1-216-840-11 | s METAL, CHIP 39K 5% 1/16W     |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description              |
|---------------------|----------------|-----------------------------|
| R924                | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R925                | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R926                | 1-216-855-11   | s METAL, CHIP 680K 5% 1/16W |
| R927                | 1-216-852-11   | s METAL, CHIP 390K 5% 1/16W |
| R928                | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R929                | 1-216-823-11   | s METAL, CHIP 1.5K 5% 1/16W |
| R930                | 1-216-829-11   | s METAL, CHIP 4.7K 5% 1/16W |
| R931                | 1-216-832-11   | s METAL, CHIP 8.2K 5% 1/16W |
| R932                | 1-216-853-11   | s METAL, CHIP 470K 5% 1/16W |
| R933                | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R934                | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R935                | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R951                | 1-216-831-11   | s METAL, CHIP 6.8K 5% 1/16W |
| R952                | 1-216-828-11   | s METAL, CHIP 3.9K 5% 1/16W |
| R953                | 1-214-972-00   | s METAL, CHIP 0.22 1% 1/4W  |
| R954                | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R955                | 1-216-836-11   | s METAL, CHIP 18K 5% 1/16W  |
| R957                | 1-216-817-11   | s METAL, CHIP 470 5% 1/16W  |
| R958                | 1-216-817-11   | s METAL, CHIP 470 5% 1/16W  |
| R959                | 1-216-817-11   | s METAL, CHIP 470 5% 1/16W  |
| R960                | 1-216-837-11   | s METAL, CHIP 22K 5% 1/16W  |
| R961                | 1-216-837-11   | s METAL, CHIP 22K 5% 1/16W  |
| R962                | 1-216-837-11   | s METAL, CHIP 22K 5% 1/16W  |
| R963                | 1-216-837-11   | s METAL, CHIP 22K 5% 1/16W  |
| R964                | Δ 1-207-620-00 | s WIREWOUND 1 10% 3W        |
| R965                | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R966                | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R967                | 1-216-844-11   | s METAL, CHIP 82K 5% 1/16W  |
| R968                | 1-216-836-11   | s METAL, CHIP 18K 5% 1/16W  |
| R969                | 1-216-836-11   | s METAL, CHIP 18K 5% 1/16W  |
| R970                | 1-216-825-11   | s METAL, CHIP 2.2K 5% 1/16W |
| R971                | 1-216-814-11   | s METAL, CHIP 270 5% 1/16W  |
| R1001               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1002               | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R1003               | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R1004               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1005               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1006               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1008               | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R1009               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1010               | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R1011               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1012               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1013               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1014               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1015               | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R1101               | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R1102               | 1-216-833-11   | s METAL, CHIP 10K 5% 1/16W  |
| R1501               | 1-216-821-11   | s METAL, CHIP 1K 5% 1/16W   |
| R1901               | 1-216-841-11   | s METAL, CHIP 47K 5% 1/16W  |
| R1902               | 1-216-849-11   | s METAL, CHIP 220K 5% 1/16W |
| R1903               | 1-216-834-11   | s METAL, CHIP 12K 5% 1/16W  |
| RV2                 | 1-241-092-11   | s RES, ADJ, CERMET 47K      |
| RV401               | 1-238-090-11   | s RES, ADJ, CERMET 10K      |
| RV402               | 1-238-090-11   | s RES, ADJ, CERMET 10K      |
| RV403               | 1-238-090-11   | s RES, ADJ, CERMET 10K      |
| RV404               | 1-238-802-11   | s RES, ADJ METAL 10K        |
| RV410               | 1-238-090-11   | s RES, ADJ, CERMET 10K      |

## (SST-2AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description               |
|---------------------|--------------|------------------------------|
| RV601               | 1-238-090-11 | s RES, ADJ, CERMET 10K       |
| RV602               | 1-238-090-11 | s RES, ADJ, CERMET 10K       |
| RV603               | 1-241-092-11 | s RES, ADJ, CERMET 47K       |
| RV701               | 1-238-802-11 | s RES, ADJ METAL 10K         |
| RV702               | 1-238-802-11 | s RES, ADJ METAL 10K         |
| RV703               | 1-238-802-11 | s RES, ADJ METAL 10K         |
| RV802               | 1-238-090-11 | s RES, ADJ, CERMET 10K       |
| RV803               | 1-241-181-11 | s RES, ADJ, CERMET 100K      |
| RV804               | 1-241-175-11 | s RES, ADJ, CERMET 220       |
| RV805               | 1-238-090-11 | s RES, ADJ, CERMET 10K       |
| RV901               | 1-241-183-11 | s RES, ADJ, CERMET 470K      |
| RV1001              | 1-241-092-11 | s RES, ADJ, CERMET 47K       |
| S1                  | 1-571-787-11 | s SWITCH, PUSH               |
| S2                  | 1-571-275-11 | s SWITCH, SLIDE              |
| S3                  | 1-571-275-11 | s SWITCH, SLIDE              |
| S401                | 1-570-598-11 | s SWITCH, DIP 4-CKT          |
| X1                  | 1-567-870-11 | s RESONATOR, CERAMIC 614KHz  |
| X2                  | 1-567-797-11 | s RESENATOR, CERAMIC 12.0MHz |
| X3                  | 1-567-870-11 | s RESONATOR, CERAMIC 614KHz  |
| X201                | 1-567-192-11 | s RESONATOR, CERAMIC 4.00MHz |
| X401                | 1-567-865-11 | s CRYSTAL, 12.00MHz          |
| X402                | 1-567-192-11 | s RESONATOR, CERAMIC 4.00MHz |
| X501                | 1-577-116-21 | s CRYSTAL 16MHz              |
| X502                | 1-567-160-21 | s RESONATOR, CERAMIC 4.19MHz |
| X701                | 1-567-699-11 | s CRYSTAL 5.85938MHz         |

## SW-466 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-870-11 | o PRINTED CIRCUIT BOARD, SW-466 |
| CN244               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| S1                  | 1-516-961-00 | s SWITCH, LEVER SLIDE           |

## SW-467P BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-952-13 | o PRINTED CIRCUIT BOARD, SW-467 |
| CN246               | 1-506-478-11 | s CONNECTOR, 13P, MALE          |
| CN247               | 1-506-489-11 | s CONNECTOR 10P, MALE           |
| CN248               | 1-506-492-11 | o CONNECTOR, 13P, MALE          |
| CN249               | 1-506-469-11 | s CONNECTOR 4P, MALE            |
| R1                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R2                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R3                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R4                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R5                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R6                  | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W     |
| R7                  | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W      |
| R8                  | 1-216-814-11 | s METAL, CHIP 270 5% 1/16W      |
| R30                 | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W      |
| RV1                 | 1-241-918-11 | s RES, VAR, CARBON 5K           |
| RV2                 | 1-241-918-11 | s RES, VAR, CARBON 5K           |
| RV3                 | 1-241-918-11 | s RES, VAR, CARBON 5K           |
| RV4                 | 1-241-918-11 | s RES, VAR, CARBON 5K           |
| RV5                 | 1-241-856-11 | s RES, VAR, CARBON 5K           |
| RV6                 | 1-241-856-11 | s RES, VAR, CARBON 5K           |
| S1                  | 1-570-145-11 | s SWITCH, SLIDE                 |
| S2                  | 1-570-145-11 | s SWITCH, SLIDE                 |
| S3                  | 1-570-145-11 | s SWITCH, SLIDE                 |
| S4                  | 1-572-374-11 | s SWITCH, SLIDE                 |
| S5                  | 1-572-374-11 | s SWITCH, SLIDE                 |
| S6                  | 1-572-374-11 | s SWITCH, SLIDE                 |
| S7                  | 1-570-145-11 | s SWITCH, SLIDE                 |
| S8                  | 1-692-077-11 | s SWITCH, SLIDE                 |
| S9                  | 1-572-374-11 | s SWITCH, SLIDE                 |
| S10                 | 1-570-145-11 | s SWITCH, SLIDE                 |
| S11                 | 1-572-374-11 | s SWITCH, SLIDE                 |
| S12                 | 1-570-145-11 | s SWITCH, SLIDE                 |
| S13                 | 1-570-145-11 | s SWITCH, SLIDE                 |

## SW-540 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-871-12 | o PRINTED CIRCUIT BOARD, SW-540 |
| CN243               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| S1                  | 1-516-961-00 | s SWITCH, LEVER SLIDE           |

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SW-543 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | 1-642-872-11 | o PRINTED CIRCUIT BOARD, SW-543 |
| CN810               | 1-506-468-11 | s CONNECTOR, 3P, MALE           |
| S1007               | 1-516-961-00 | s SWITCH, LEVER SLIDE           |

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TBC-27 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8271-858-A | o MOUNTED CIRCUIT BOARD, TBC-27  |
| 1pc                 | 3-947-151-01 | o PLATE, SHIELD, CARD            |
| 1pc                 | 7-621-759-45 | s SCREW +PSW 2.6x6               |
| 2pcs                | 2-251-622-11 | s LEVER, PC BOARD                |
| 10pcs               | 1-623-599-11 | o PRINTED CIRCUIT BOARD, DUS-194 |
| C1                  | 1-126-923-11 | s ELECT 220uF 20% 10V            |
| C2                  | 1-126-923-11 | s ELECT 220uF 20% 10V            |
| C3                  | 1-126-923-11 | s ELECT 220uF 20% 10V            |
| C4                  | 1-126-923-11 | s ELECT 220uF 20% 10V            |
| C5                  | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C6                  | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C7                  | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C8                  | 1-163-112-00 | s CERAMIC, CHIP 62PF 5% 50V      |
| C9                  | 1-163-112-00 | s CERAMIC, CHIP 62PF 5% 50V      |
| C10                 | 1-163-251-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C11                 | 1-135-070-00 | s TANTALUM, CHIP 0.1uF 10% 35V   |
| C12                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C13                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C14                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C15                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C16                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C17                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C18                 | 1-135-145-11 | s TANTALUM, CHIP 0.47uF 10% 35V  |
| C19                 | 1-135-159-21 | s TANTALUM, CHIP 10uF 10% 20V    |
| C20                 | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C21                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C22                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C24                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C25                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C27                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C28                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C29                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C30                 | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C31                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C32                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C33                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C34                 | 1-126-935-11 | s ELECT 470uF 20% 16V            |
| C35                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C36                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C37                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C38                 | 1-128-057-11 | s ELECT 330uF 20% 6.3V           |
| C39                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C41                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C42                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C43                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C44                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C45                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C50                 | 1-135-216-11 | s TANTALUM, CHIP 10uF 20% 10V    |
| C51                 | 1-163-017-00 | s CERAMIC, CHIP 0.0047uF 5% 50V  |
| C52                 | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C55                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C56                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C57                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C61                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C63                 | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C65                 | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C66                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C67                 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C68                 | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V  |

## (TBC-27 BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description                |
|---------------------|----------------|-------------------------------|
| C69                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C70                 | 1-128-057-11 s | ELECT 330uF 20% 6.3V          |
| C71                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C72                 | 1-163-239-11 s | CERAMIC, CHIP 33PF 5% 50V     |
| C73                 | 1-124-903-11 s | ELECT 1uF 20% 50V             |
| C74                 | 1-126-964-11 s | ELECT 10uF 20% 50V            |
| C75                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C76                 | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V     |
| C77                 | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V     |
| C78                 | 1-163-227-11 s | CERAMIC, CHIP 10PF 5% 50V     |
| C79                 | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C80                 | 1-163-251-11 s | CERAMIC, CHIP 100PF 5% 50V    |
| C81                 | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C82                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C83                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C85                 | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V     |
| C86                 | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V     |
| C87                 | 1-163-275-11 s | CERAMIC, CHIP 0.001uF 5% 50V  |
| C88                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C89                 | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C90                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C91                 | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C92                 | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C93                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C94                 | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C95                 | 1-126-935-11 s | ELECT 470uF 20% 16V           |
| C96                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C97                 | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C98                 | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V       |
| C99                 | 1-163-115-00 s | CERAMIC, CHIP 82PF 5% 50V     |
| C100                | 1-163-251-11 s | CERAMIC, CHIP 100PF 5% 50V    |
| C102                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C103                | 1-128-057-11 s | ELECT 330uF 20% 6.3V          |
| C104                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C105                | 1-164-005-11 s | CERAMIC, CHIP 0.47uF 25V      |
| C107                | 1-163-097-00 s | CERAMIC, CHIP 15PF 5% 50V     |
| C108                | 1-163-251-11 s | CERAMIC, CHIP 100PF 5% 50V    |
| C402                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C403                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C404                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C405                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V       |
| C407                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C409                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C410                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C416                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C417                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C418                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C419                | 1-163-253-11 s | CERAMIC, CHIP 120PF 5% 50V    |
| C420                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V       |
| C421                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V       |
| C422                | 1-163-127-00 s | CERAMIC, CHIP 270PF 5% 50V    |
| C423                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C424                | 1-163-139-00 s | CERAMIC, CHIP 820PF 5% 50V    |
| C425                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C426                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C427                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C428                | 1-126-947-11 s | ELECT 47uF 20% 35V            |
| C429                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V |
| C430                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V       |

## (TBC-27 BOARD)

| Ref. No.<br>or Q'ty | Part No.       | SP Description                  |
|---------------------|----------------|---------------------------------|
| C431                | 1-135-092-21 s | TANTALUM, CHIP 3.3uF 10% 16V    |
| C432                | 1-163-023-00 s | CERAMIC, CHIP 0.015uF 5% 50V    |
| C436                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V         |
| C440                | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V       |
| C441                | 1-163-235-11 s | CERAMIC, CHIP 22PF 5% 50V       |
| C442                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C443                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C444                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C445                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C446                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V         |
| C447                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V         |
| C448                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C449                | 1-124-903-11 s | ELECT 1uF 20% 50V               |
| C450                | 1-163-241-11 s | CERAMIC, CHIP 39PF 5% 50V       |
| C451                | 1-126-947-11 s | ELECT 47uF 20% 35V              |
| C452                | 1-126-964-11 s | ELECT 10uF 20% 50V              |
| C453                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C454                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C455                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C456                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C457                | 1-164-161-11 s | CERAMIC, CHIP 0.0022uF 10% 100V |
| C458                | 1-164-182-11 s | CERAMIC CHIP 3300PF 10% 100V    |
| C459                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C460                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C461                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C462                | 1-126-111-11 s | ELECT 3.3uF 20% 100V            |
| C464                | 1-163-125-00 s | CERAMIC, CHIP 220PF 5% 50V      |
| C465                | 1-163-098-00 s | CERAMIC CHIP 16PF 5% 50V        |
| C466                | 1-164-232-11 s | CERAMIC 0.01uF 10% 100V         |
| C467                | 1-162-638-11 s | CERAMIC, CHIP 1uF 16V           |
| C468                | 1-162-638-11 s | CERAMIC, CHIP 1uF 16V           |
| C473                | 1-163-275-11 s | CERAMIC, CHIP 0.001uF 5% 50V    |
| C475                | 1-135-145-11 s | TANTALUM, CHIP 0.47uF 10% 35V   |
| C476                | 1-163-127-00 s | CERAMIC, CHIP 270PF 5% 50V      |
| C477                | 1-164-161-11 s | CERAMIC, CHIP 0.0022uF 10% 100V |
| C478                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C479                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C480                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C481                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C482                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C483                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C484                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C486                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C487                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C488                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C489                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C490                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C491                | 1-124-916-11 s | ELECT 22uF 20% 63V              |
| C492                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C493                | 1-163-038-91 s | CERAMIC, CHIP 0.1uF 25V         |
| C494                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C495                | 1-126-933-11 s | ELECT 100uF 20% 16V             |
| C496                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C497                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C498                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C499                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C500                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C501                | 1-163-037-91 s | CERAMIC, CHIP 0.022uF 10% 25V   |
| C502                | 1-126-933-11 s | ELECT 100uF 20% 16V             |

## (TBC-27 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C503                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C504                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C505                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C506                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C507                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C508                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C509                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C510                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C511                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C512                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C513                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C514                | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C515                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C516                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C517                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C519                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C520                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C521                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C522                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C523                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C524                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C525                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C526                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C527                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C528                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C529                | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C530                | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C532                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C533                | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C534                | 1-163-235-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C535                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C538                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C539                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C540                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C542                | 1-163-251-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C543                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C544                | 1-107-077-00 | s MICA 47PF 5% 50V              |
| C601                | 1-163-023-00 | s CERAMIC, CHIP 0.015uF 5% 50V  |
| C602                | 1-164-345-11 | s CERAMIC, CHIP 0.082uF 10% 25V |
| C603                | 1-163-986-00 | s CERAMIC 0.027uF 10% 25V       |
| C604                | 1-163-986-00 | s CERAMIC 0.027uF 10% 25V       |
| C605                | 1-163-986-00 | s CERAMIC 0.027uF 10% 25V       |
| C606                | 1-163-989-11 | s CERAMIC, CHIP 0.033uF 10% 25V |
| C607                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V    |
| C608                | 1-124-925-11 | s ELECT 2.2uF 20% 100V          |
| C609                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C610                | 1-164-232-11 | s CERAMIC 0.01uF 10% 100V       |
| C611                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C612                | 1-163-121-00 | s CERAMIC, CHIP 150PF 5% 50V    |
| C613                | 1-124-903-11 | s ELECT 1uF 20% 50V             |
| C614                | 1-163-105-00 | s CERAMIC, CHIP 33PF 5% 50V     |
| C615                | 1-163-105-00 | s CERAMIC, CHIP 33PF 5% 50V     |
| C616                | 1-135-092-21 | s TANTALUM, CHIP 3.3uF 10% 16V  |
| C701                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C702                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C703                | 1-162-726-11 | s CERAMIC 470PF 1% 50V          |
| C704                | 1-162-777-11 | s CERAMIC 0.01uF 5% 50V         |
| C705                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V    |
| C706                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C715                | 1-163-037-91 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C716                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| CN611               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CN612               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CV401               | 1-141-322-11 | s CAP, VAR, TRIMMER 20PF        |
| CV402               | 1-141-322-11 | s CAP, VAR, TRIMMER 20PF        |
| D2                  | 8-719-800-76 | s DIODE 1SS226                  |
| D3                  | 8-719-018-78 | s DIODE 02CZ3.9                 |
| D6                  | 8-719-915-43 | s DIODE, VARICAP FC54M          |
| D401                | 8-719-940-45 | s DIODE DWA010                  |
| D402                | 8-713-300-88 | s DIODE 1T33C-01                |
| D407                | 8-719-941-86 | s DIODE DAN202U                 |
| D408                | 8-719-941-86 | s DIODE DAN202U                 |
| D409                | 8-719-941-86 | s DIODE DAN202U                 |
| D601                | 8-719-941-86 | s DIODE DAN202U                 |
| D602                | 8-719-949-46 | s DIODE 1T32                    |
| FB1                 | 1-543-775-11 | s FILTER, EMI                   |
| FB2                 | 1-543-775-11 | s FILTER, EMI                   |
| FB3                 | 1-543-775-11 | s FILTER, EMI                   |
| IC1                 | 8-741-104-00 | s IC BX1040                     |
| IC2                 | 8-759-101-12 | s IC UPC311G2                   |
| IC3                 | 8-752-335-47 | s IC CXD1216M                   |
| IC4                 | 8-752-332-67 | s IC CXD1217M                   |
| IC5                 | 8-759-239-55 | s IC TC74HC123AF                |
| IC6                 | 8-759-908-17 | s IC TL082CPS                   |
| IC7                 | 8-759-908-17 | s IC TL082CPS                   |
| IC8                 | 8-759-908-17 | s IC TL082CPS                   |
| IC11                | 8-759-300-71 | s IC HD14053BFP                 |
| IC12                | 8-759-701-75 | s IC NJM7805FA                  |
| IC14                | 8-759-980-27 | s IC SN74ALS163BNS              |
| IC15                | 8-759-239-55 | s IC TC74HC123AF                |
| IC16                | 8-759-927-46 | s IC SN74HC00NS                 |
| IC17                | 8-759-925-74 | s IC TC74HC04NS                 |
| IC18                | 8-759-926-24 | s IC SN74HC164NS                |
| IC19                | 8-759-926-24 | s IC SN74HC164NS                |
| IC21                | 8-759-908-17 | s IC TL082CPS                   |
| IC22                | 8-759-239-55 | s IC TC74HC123AF                |
| IC23                | 8-752-306-51 | s IC CX23065A                   |
| IC28                | 8-759-926-24 | s IC SN74HC164NS                |
| IC29                | 8-759-926-24 | s IC SN74HC164NS                |
| IC31                | 8-759-239-55 | s IC TC74HC123AF                |
| IC401               | 8-759-701-75 | s IC NJM7805FA                  |
| IC402               | 8-759-239-55 | s IC TC74HC123AF                |
| IC403               | 8-752-334-55 | s IC CXD1175M                   |
| IC404               | 8-752-334-55 | s IC CXD1175M                   |
| IC405               | 8-759-925-76 | s IC SN74HC08NS                 |
| IC406               | 8-759-987-17 | s IC CXD1226Q                   |
| IC407               | 8-759-072-23 | s IC MB87647                    |
| IC408               | 8-759-701-75 | s IC NJM7805FA                  |
| IC409               | 8-759-925-85 | s IC SN74HC32NS                 |
| IC410               | 8-759-926-29 | s IC SN74HC175NS                |
| IC411               | 8-759-927-46 | s IC SN74HC00NS                 |
| IC412               | 8-759-009-51 | s IC MC14538BF                  |
| IC413               | 8-759-925-90 | s IC SN74HC74NS                 |
| IC414               | 8-759-710-86 | s IC NJM2233BM                  |
| IC415               | 8-752-340-75 | s IC CXK1206AM                  |
| IC416               | 8-752-340-75 | s IC CXK1206AM                  |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description          |
|---------------------|--------------|----|----------------------|
| IC417               | 8-752-340-75 | s  | IC CXK1206AM         |
| IC418               | 8-759-926-23 | s  | IC SN74HC163NS       |
| IC420               | 8-759-987-19 | s  | IC CXD1228Q          |
| IC421               | 8-759-987-18 | s  | IC CXD1227Q          |
| IC422               | 8-752-032-96 | s  | IC CXA1106M          |
| IC423               | 8-752-032-96 | s  | IC CXA1106M          |
| IC424               | 8-759-700-43 | s  | IC NJM4558M          |
| IC425               | 8-759-700-43 | s  | IC NJM4558M          |
| IC426               | 8-759-239-55 | s  | IC TC74HC123AF       |
| IC427               | 8-759-925-90 | s  | IC SN74HC74NS        |
| IC428               | 8-759-239-55 | s  | IC TC74HC123AF       |
| IC429               | 8-759-925-90 | s  | IC SN74HC74NS        |
| IC430               | 8-759-908-17 | s  | IC TL082CPS          |
| IC701               | 8-759-926-23 | s  | IC SN74HC163NS       |
| IC702               | 8-759-925-90 | s  | IC SN74HC74NS        |
| IC703               | 8-759-927-46 | s  | IC SN74HC00NS        |
| IC704               | 8-759-925-99 | s  | IC SN74HC109NS       |
| IC705               | 8-759-925-74 | s  | IC TC74HC04NS        |
| IC708               | 8-759-239-55 | s  | IC TC74HC123AF       |
| IC709               | 8-759-927-46 | s  | IC SN74HC00NS        |
| L1                  | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L2                  | 1-410-385-41 | s  | INDUCTOR CHIP 22uH   |
| L3                  | 1-410-385-41 | s  | INDUCTOR CHIP 22uH   |
| L4                  | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L5                  | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L6                  | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L7                  | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L9                  | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L10                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L11                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L12                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L13                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L15                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L16                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L17                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L18                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L19                 | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L401                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L402                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L403                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L404                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L405                | 1-410-656-11 | s  | INDUCTOR CHIP 150uH  |
| L406                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L407                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L408                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L409                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L410                | 1-410-377-31 | s  | INDUCTOR, CHIP 4.7uH |
| L411                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L412                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L413                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L414                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L415                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L416                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L417                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L418                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L419                | 1-408-789-21 | s  | INDUCTOR CHIP 100uH  |
| L421                | 1-408-785-21 | s  | INDUCTOR CHIP 47uH   |
| L422                | 1-410-388-31 | s  | INDUCTOR CHIP 39uH   |
| L423                | 1-410-388-31 | s  | INDUCTOR CHIP 39uH   |

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| Ref. No.<br>or Q'ty | Part No.      | SP | Description               |
|---------------------|---------------|----|---------------------------|
| L424                | 1-410-369-11  | s  | INDUCTOR CHIP 1uH         |
| L701                | 1-408-785-21  | s  | INDUCTOR CHIP 47uH        |
| L702                | 1-408-785-21  | s  | INDUCTOR CHIP 47uH        |
| L703                | 1-408-785-21  | s  | INDUCTOR CHIP 47uH        |
| L704                | 1-408-767-21  | s  | INDUCTOR, CHIP 1.5uH      |
| LV3                 | 1-408-510-11  | s  | COIL, VAR 7.96MHz         |
| PS1                 | △1-532-605-00 | s  | LINK, IC 0.4A             |
| PS2                 | △1-532-605-00 | s  | LINK, IC 0.4A             |
| Q1                  | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q2                  | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q3                  | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q4                  | 8-729-109-41  | s  | TRANSISTOR 2SK94-X1       |
| Q5                  | 8-729-209-07  | s  | TRANSISTOR 2SC4213-B      |
| Q6                  | 8-729-109-41  | s  | TRANSISTOR 2SK94-X1       |
| Q8                  | 8-729-109-41  | s  | TRANSISTOR 2SK94-X1       |
| Q9                  | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q11                 | 8-729-109-41  | s  | TRANSISTOR 2SK94-X1       |
| Q12                 | 8-729-117-32  | s  | TRANSISTOR 2SC4177        |
| Q13                 | 8-729-117-32  | s  | TRANSISTOR 2SC4177        |
| Q14                 | 8-729-117-32  | s  | TRANSISTOR 2SC4177        |
| Q401                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q402                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q403                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q404                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q405                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q406                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q407                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q408                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q409                | 8-729-216-22  | s  | TRANSISTOR 2SA1162        |
| Q411                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q412                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q414                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q415                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q416                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q417                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q418                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q419                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q420                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q421                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q422                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q423                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q424                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q425                | 8-729-209-07  | s  | TRANSISTOR 2SC4213-B      |
| Q427                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q601                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q602                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q603                | 8-729-216-22  | s  | TRANSISTOR 2SA1162        |
| Q604                | 8-729-901-01  | s  | TRANSISTOR DTC144EK       |
| Q605                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q606                | 8-729-216-22  | s  | TRANSISTOR 2SA1162        |
| Q607                | 8-729-120-28  | s  | TRANSISTOR 2SC1623-L5L6   |
| Q616                | 8-729-209-07  | s  | TRANSISTOR 2SC4213-B      |
| R1                  | 1-216-077-00  | s  | METAL, CHIP 15K 5% 1/10W  |
| R2                  | 1-216-085-00  | s  | METAL, CHIP 33K 5% 1/10W  |
| R3                  | 1-216-057-91  | s  | METAL, CHIP 2.2K 5% 1/10W |
| R4                  | 1-216-049-00  | s  | METAL, CHIP 1K 5% 1/10W   |
| R5                  | 1-216-077-00  | s  | METAL, CHIP 15K 5% 1/10W  |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R6                  | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W     |
| R7                  | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R8                  | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W      |
| R9                  | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R10                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R11                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R12                 | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R14                 | 1-216-295-00 | s METAL, CHIP 0                |
| R16                 | 1-216-295-00 | s METAL, CHIP 0                |
| R17                 | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W  |
| R18                 | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W  |
| R19                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R20                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R22                 | 1-216-033-00 | s METAL, CHIP 220 5% 1/10W     |
| R26                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R28                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R31                 | 1-216-295-00 | s METAL, CHIP 0                |
| R32                 | 1-216-690-11 | s METAL, CHIP 43K 0.5% 1/10W   |
| R33                 | 1-216-671-11 | s METAL, CHIP 6.8K 0.5% 1/10W  |
| R34                 | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W  |
| R35                 | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W     |
| R36                 | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W   |
| R37                 | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R39                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R40                 | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W    |
| R42                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R43                 | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W    |
| R44                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R45                 | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W    |
| R48                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R49                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W    |
| R50                 | 1-216-687-11 | s METAL, CHIP 33K 0.5% 1/10W   |
| R52                 | 1-216-295-00 | s METAL, CHIP 0                |
| R53                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R54                 | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R55                 | 1-216-673-91 | s METAL, CHIP 8.2K 0.50% 1/10W |
| R56                 | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W    |
| R57                 | 1-216-673-91 | s METAL, CHIP 8.2K 0.50% 1/10W |
| R58                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R64                 | 1-216-667-11 | s METAL, CHIP 4.7K 0.5% 1/10W  |
| R65                 | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W  |
| R66                 | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W   |
| R67                 | 1-216-671-11 | s METAL, CHIP 6.8K 0.5% 1/10W  |
| R68                 | 1-216-669-11 | s METAL, CHIP 5.6K 0.5% 1/10W  |
| R69                 | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R70                 | 1-216-685-11 | s METAL, CHIP 27K 0.5% 1/10W   |
| R71                 | 1-216-660-11 | s METAL, CHIP 2.4K 0.5% 1/10W  |
| R72                 | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R73                 | 1-216-655-11 | s METAL, CHIP 1.5K 0.5% 1/10W  |
| R74                 | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W   |
| R75                 | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W   |
| R77                 | 1-216-662-11 | s METAL, CHIP 3K 0.5% 1/10W    |
| R78                 | 1-216-679-11 | s METAL, CHIP 15K 0.5% 1/10W   |
| R79                 | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W  |
| R80                 | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W   |
| R81                 | 1-216-643-11 | s METAL, CHIP 470 0.5% 1/10W   |
| R82                 | 1-216-657-11 | s METAL, CHIP 1.8K 0.5% 1/10W  |
| R83                 | 1-216-655-11 | s METAL, CHIP 1.5K 0.5% 1/10W  |
| R84                 | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |

## (TBC-27 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R85                 | 1-216-651-11 | s METAL, CHIP 1K 0.5% 1/10W   |
| R87                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R88                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R89                 | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R90                 | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R91                 | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R92                 | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R93                 | 1-216-635-11 | s METAL, CHIP 220 0.5% 1/10W  |
| R94                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R95                 | 1-216-059-00 | s METAL, CHIP 2.7K 5% 1/10W   |
| R96                 | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R97                 | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R98                 | 1-216-063-00 | s METAL, CHIP 3.9K 5% 1/10W   |
| R99                 | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R100                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R101                | 1-216-295-00 | s METAL, CHIP 0               |
| R102                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R106                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R107                | 1-216-639-11 | s METAL, CHIP 330 0.5% 1/10W  |
| R108                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R110                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R113                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R119                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R120                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R121                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R122                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R123                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R136                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R143                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R401                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R402                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W    |
| R403                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R404                | 1-216-035-00 | s METAL, CHIP 270 5% 1/10W    |
| R405                | 1-216-047-00 | s METAL, CHIP 820 5% 1/10W    |
| R406                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R407                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R408                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R409                | 1-216-047-00 | s METAL, CHIP 820 5% 1/10W    |
| R410                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R411                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R412                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R413                | 1-216-295-00 | s METAL, CHIP 0               |
| R414                | 1-216-295-00 | s METAL, CHIP 0               |
| R415                | 1-216-295-00 | s METAL, CHIP 0               |
| R416                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R417                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R418                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R419                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W    |
| R420                | 1-216-083-00 | s METAL, CHIP 27K 5% 1/10W    |
| R421                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R422                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R423                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R424                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R425                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W    |
| R426                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R427                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R428                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R429                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R430                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |



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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R431                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R432                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R433                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W    |
| R434                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R436                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R437                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R438                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R439                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R440                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R441                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R442                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R443                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R444                | 1-216-295-00 | s METAL, CHIP 0               |
| R447                | 1-216-295-00 | s METAL, CHIP 0               |
| R448                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R449                | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W   |
| R450                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R451                | 1-216-021-00 | s METAL, CHIP 68 5% 1/10W     |
| R452                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R453                | 1-216-019-00 | s METAL, CHIP 56 5% 1/10W     |
| R454                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W   |
| R455                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R456                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W  |
| R457                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R459                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R460                | 1-216-069-00 | s METAL, CHIP 6.8K 5% 1/10W   |
| R461                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R462                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W    |
| R463                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R464                | 1-216-119-00 | s METAL, CHIP 820K 5% 1/10W   |
| R465                | 1-216-111-00 | s METAL, CHIP 390K 5% 1/10W   |
| R466                | 1-216-105-91 | s METAL, CHIP 220K 5% 1/10W   |
| R467                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R468                | 1-216-119-00 | s METAL, CHIP 820K 5% 1/10W   |
| R469                | 1-216-111-00 | s METAL, CHIP 390K 5% 1/10W   |
| R470                | 1-216-105-91 | s METAL, CHIP 220K 5% 1/10W   |
| R471                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R472                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R473                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R474                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R475                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R477                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R478                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R487                | 1-216-683-11 | s METAL, CHIP 22K 0.5% 1/10W  |
| R488                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R492                | 1-216-678-11 | s METAL, CHIP 13K 0.5% 1/10W  |
| R493                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R494                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W   |
| R495                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R497                | 1-216-295-00 | s METAL, CHIP 0               |
| R498                | 1-216-295-00 | s METAL, CHIP 0               |
| R500                | 1-216-295-00 | s METAL, CHIP 0               |
| R502                | 1-216-295-00 | s METAL, CHIP 0               |
| R504                | 1-216-295-00 | s METAL, CHIP 0               |
| R506                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R507                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R508                | 1-216-295-00 | s METAL, CHIP 0               |
| R510                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |
| R511                | 1-216-121-00 | s METAL, CHIP 1M 5% 1/10W     |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R513                | 1-216-295-00 | s METAL, CHIP 0               |
| R514                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W   |
| R516                | 1-216-648-11 | s METAL, CHIP 750 0.5% 1/10W  |
| R517                | 1-216-657-11 | s METAL, CHIP 1.8K 0.5% 1/10W |
| R518                | 1-216-648-11 | s METAL, CHIP 750 0.5% 1/10W  |
| R519                | 1-216-657-11 | s METAL, CHIP 1.8K 0.5% 1/10W |
| R520                | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W   |
| R521                | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W   |
| R522                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R523                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R524                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R525                | 1-216-653-11 | s METAL, CHIP 1.2K 0.5% 1/10W |
| R526                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R527                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R528                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R529                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R534                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R535                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R536                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R537                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W    |
| R538                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R539                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R540                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R541                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R542                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R543                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R544                | 1-216-061-00 | s METAL, CHIP 3.3K 5% 1/10W   |
| R545                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R546                | 1-216-659-11 | s METAL, CHIP 2.2K 0.5% 1/10W |
| R547                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R548                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W    |
| R549                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R550                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W    |
| R551                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R552                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R553                | 1-216-675-91 | s METAL, CHIP 10K 0.50% 1/10W |
| R554                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R555                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R556                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R557                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R558                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R560                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R561                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R562                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |
| R563                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R564                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R565                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R566                | 1-216-043-00 | s METAL, CHIP 560 5% 1/10W    |
| R567                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W     |
| R568                | 1-216-634-11 | s METAL, CHIP 200 0.5% 1/10W  |
| R569                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R570                | 1-216-053-00 | s METAL, CHIP 1.5K 5% 1/10W   |
| R571                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R573                | 1-216-295-00 | s METAL, CHIP 0               |
| R574                | 1-216-295-00 | s METAL, CHIP 0               |
| R575                | 1-216-295-00 | s METAL, CHIP 0               |
| R577                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W    |
| R578                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W    |
| R579                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R580                | 1-216-295-00 | s METAL, CHIP 0                |
| R581                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R585                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R586                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R587                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R588                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R589                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R590                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R591                | 1-216-097-00 | s METAL, CHIP 100K 5% 1/10W    |
| R592                | 1-216-295-00 | s METAL, CHIP 0                |
| R597                | 1-216-295-00 | s METAL, CHIP 0                |
| R598                | 1-216-295-00 | s METAL, CHIP 0                |
| R599                | 1-216-295-00 | s METAL, CHIP 0                |
| R601                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R602                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R603                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R604                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R605                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W  |
| R606                | 1-218-756-11 | s METAL, CHIP 150K 0.50% 1/10W |
| R607                | 1-216-699-11 | s METAL, CHIP 100K 0.5% 1/10W  |
| R608                | 1-216-691-11 | s METAL, CHIP 47K 0.5% 1/10W   |
| R609                | 1-216-057-91 | s METAL, CHIP 2.2K 5% 1/10W    |
| R610                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R611                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R612                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R613                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R614                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R615                | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W    |
| R616                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R617                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R618                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R619                | 1-216-065-00 | s METAL, CHIP 4.7K 5% 1/10W    |
| R620                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R621                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W     |
| R622                | 1-216-085-00 | s METAL, CHIP 33K 5% 1/10W     |
| R623                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W     |
| R624                | 1-216-077-00 | s METAL, CHIP 15K 5% 1/10W     |
| R625                | 1-216-011-00 | s METAL, CHIP 27 5% 1/10W      |
| R626                | 1-216-041-00 | s METAL, CHIP 470 5% 1/10W     |
| R627                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R628                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R629                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R631                | 1-216-295-00 | s METAL, CHIP 0                |
| R632                | 1-216-295-00 | s METAL, CHIP 0                |
| R633                | 1-216-117-00 | s METAL, CHIP 680K 5% 1/10W    |
| R634                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R635                | 1-216-049-00 | s METAL, CHIP 1K 5% 1/10W      |
| R701                | 1-216-680-11 | s METAL, CHIP 16K 0.5% 1/10W   |
| R702                | 1-216-690-11 | s METAL, CHIP 43K 0.5% 1/10W   |
| R703                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R704                | 1-216-073-00 | s METAL, CHIP 10K 5% 1/10W     |
| R705                | 1-216-089-91 | s METAL, CHIP 47K 5% 1/10W     |
| R706                | 1-216-081-00 | s METAL, CHIP 22K 5% 1/10W     |
| R707                | 1-216-295-00 | s METAL, CHIP 0                |
| R708                | 1-216-295-00 | s METAL, CHIP 0                |
| R709                | 1-216-295-00 | s METAL, CHIP 0                |
| R710                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |
| R711                | 1-216-025-00 | s METAL, CHIP 100 5% 1/10W     |

## (TBC-27 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description              |
|---------------------|--------------|-----------------------------|
| RV1                 | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV2                 | 1-238-802-11 | s RES, ADJ METAL 10K        |
| RV3                 | 1-238-783-11 | s RES, ADJ, CERMET 500      |
| RV401               | 1-238-798-11 | s RES, ADJ METAL 500        |
| RV402               | 1-238-799-11 | s RES, ADJ METAL 1K         |
| RV701               | 1-238-801-11 | s RES, ADJ METAL 5K         |
| RV702               | 1-238-802-11 | s RES, ADJ METAL 10K        |
| TH1                 | 1-808-438-11 | s THERMISTOR                |
| X1                  | 1-577-294-11 | s VCO, CRYSTAL 14.187500MHz |
| X2                  | 1-577-295-11 | s VCO, CRYSTAL 17.734475MHz |
| X3                  | 1-579-057-11 | s CRYSTAL 17.734475MHz      |
| X401                | 1-579-057-11 | s CRYSTAL 17.734475MHz      |

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TR-72 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description       |
|---------------------|--------------|----------------------|
| 1pc                 | A-8262-577-A | s SENSOR, ASSY       |
| C1                  | 1-124-228-11 | s ELECT 22uF 20% 10V |

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TS-74L BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                        |
|---------------------|--------------|---------------------------------------|
| 1pc                 | A-7070-628-A | o MOUNTED CIRCUIT BOARD, TS-74 (LEFT) |
| Q715                | 8-729-700-11 | s NJL7141E-N                          |

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TS-74R BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                         |
|---------------------|--------------|--|
| 1pc                 | A-7070-627-A | o MOUNTED CIRCUIT BOARD, TS-74 (RIGHT) |
| Q715                | 8-729-700-11 | s NJL7141E-N                           |

VA-111AP BOARD

Ref. No.

or Q'ty Part No. SP Description

|      |              |                                   |
|------|--------------|-----------------------------------|
| 1pc  | A-8271-861-A | o MOUNTED CIRCUIT BOARD, VA-111AP |
| 2pcs | 2-251-622-11 | s LEVER, PC BOARD                 |
| C101 | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C102 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C103 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C104 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C105 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C106 | 1-163-115-00 | s CERAMIC, CHIP 82PF 5% 50V       |
| C107 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C108 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C109 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C110 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C111 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C112 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C113 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V      |
| C114 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C115 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C116 | 1-126-964-11 | s ELECT 10uF 20% 50V              |
| C117 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C118 | 1-163-113-00 | s CERAMIC, CHIP 68PF 5% 50V       |
| C121 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C122 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C123 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C124 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C125 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C126 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C127 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C128 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C129 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C130 | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C131 | 1-128-057-11 | s ELECT 330uF 20% 6.3V            |
| C132 | 1-128-057-11 | s ELECT 330uF 20% 6.3V            |
| C133 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C134 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C135 | 1-126-933-11 | s ELECT 100uF 20% 16V             |
| C136 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C137 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C138 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C139 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C145 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C146 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C147 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C148 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C149 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C150 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V   |
| C151 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C152 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V         |
| C153 | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V       |
| C154 | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C155 | 1-124-916-11 | s ELECT 22uF 20% 63V              |
| C156 | 1-128-057-11 | s ELECT 330uF 20% 6.3V            |
| C157 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C158 | 1-128-057-11 | s ELECT 330uF 20% 6.3V            |
| C159 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C160 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C161 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V    |
| C162 | 1-126-947-11 | s ELECT 47uF 20% 35V              |
| C163 | 1-162-924-11 | s CERAMIC 56PF 5% 50V             |

(VA-111AP BOARD)

Ref. No.

or Q'ty Part No. SP Description

|      |              |                                 |
|------|--------------|---------------------------------|
| C165 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C166 | 1-163-124-00 | s CERAMIC, CHIP 200PF 5% 50V    |
| C167 | 1-162-925-11 | s CERAMIC, CHIP 68PF 5% 50V     |
| C168 | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C169 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C170 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C171 | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V  |
| C172 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C173 | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C174 | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C175 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C176 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C177 | 1-162-917-11 | s CERAMIC, CHIP 15PF 5% 50V     |
| C178 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C179 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C180 | 1-162-925-11 | s CERAMIC, CHIP 68PF 5% 50V     |
| C181 | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V     |
| C182 | 1-162-916-11 | s CERAMIC, CHIP 12PF 5% 50V     |
| C183 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C184 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C185 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C186 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C187 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C188 | 1-126-154-11 | s ELECT 47uF 20% 6.3V           |
| C189 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C190 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C191 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C192 | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V       |
| C193 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C194 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C195 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C196 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C197 | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C198 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C199 | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C200 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C201 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C203 | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C204 | 1-126-964-11 | s ELECT 10uF 20% 50V            |
| C205 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C206 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C207 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C208 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C209 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C210 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C211 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C212 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C213 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C214 | 1-124-916-11 | s ELECT 22uF 20% 63V            |
| C215 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C216 | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C217 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C218 | 1-128-057-11 | s ELECT 330uF 20% 6.3V          |
| C219 | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C220 | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C221 | 1-126-933-11 | s ELECT 100uF 20% 16V           |
| C222 | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V    |
| C223 | 1-164-222-11 | s CERAMIC 0.22uF 25V            |
| C224 | 1-126-947-11 | s ELECT 47uF 20% 35V            |

## (VA-111AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C225                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V      |
| C226                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C227                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C228                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C229                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C230                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C231                | 1-124-916-11 | s ELECT 22uF 20% 63V             |
| C232                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C233                | 1-128-057-11 | s ELECT 330uF 20% 6.3V           |
| C234                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C235                | 1-128-057-11 | s ELECT 330uF 20% 6.3V           |
| C236                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C237                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C238                | 1-135-070-00 | s TANTALUM, CHIP 0.1uF 10% 35V   |
| C239                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C240                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V     |
| C241                | 1-164-156-11 | s CERAMIC, CHIP 0.1uF 25V        |
| C242                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C243                | 1-162-925-11 | s CERAMIC, CHIP 68PF 5% 50V      |
| C250                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C251                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C252                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C253                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C256                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C257                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C258                | 1-164-160-11 | s CERAMIC, CHIP 20PF 5% 50V      |
| C259                | 1-164-160-11 | s CERAMIC, CHIP 20PF 5% 50V      |
| C260                | 1-163-133-00 | s CERAMIC, CHIP 470PF 5% 50V     |
| C261                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C262                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C263                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C264                | 1-163-243-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C266                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C267                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C268                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C269                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C270                | 1-162-925-11 | s CERAMIC, CHIP 68PF 5% 50V      |
| C271                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C301                | 1-164-156-11 | s CERAMIC, CHIP 0.1uF 25V        |
| C303                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C600                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C601                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C602                | 1-124-903-11 | s ELECT 1uF 20% 50V              |
| C603                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C606                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C608                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C610                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C611                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C612                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V      |
| C613                | 1-163-263-91 | s CERAMIC, CHIP 330PF 5% 50V     |
| C614                | 1-163-124-00 | s CERAMIC, CHIP 200PF 5% 50V     |
| C615                | 1-163-124-00 | s CERAMIC, CHIP 200PF 5% 50V     |
| C616                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V |
| C617                | 1-164-382-11 | s CERAMIC, CHIP 91PF 5% 50V      |
| C618                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C621                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C622                | 1-162-916-11 | s CERAMIC, CHIP 12PF 5% 50V      |
| C623                | 1-126-964-11 | s ELECT 10uF 20% 50V             |
| C624                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |

## (VA-111AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C625                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C626                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C627                | 1-162-968-11 | s CERAMIC, CHIP 0.0047uF 10% 50V |
| C628                | 1-163-275-11 | s CERAMIC, CHIP 0.001uF 5% 50V   |
| C629                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C630                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C631                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V   |
| C632                | 1-162-923-11 | s CERAMIC, CHIP 47PF 5% 50V      |
| C633                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C634                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C801                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C802                | 1-135-125-21 | s TANTALUM, CHIP 33uF 20% 10V    |
| C803                | 1-135-125-21 | s TANTALUM, CHIP 33uF 20% 10V    |
| C804                | 1-163-038-91 | s CERAMIC, CHIP 0.1uF 25V        |
| C805                | 1-163-035-00 | s CERAMIC, CHIP 0.047uF 50V      |
| C806                | 1-135-145-11 | s TANTALUM, CHIP 0.47uF 10% 35V  |
| C807                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C808                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C809                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C810                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C811                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C812                | 1-135-125-21 | s TANTALUM, CHIP 33uF 20% 10V    |
| C813                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C814                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C815                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C816                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C817                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C818                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C819                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C820                | 1-162-924-11 | s CERAMIC 56PF 5% 50V            |
| C821                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C822                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C823                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C824                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C825                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C826                | 1-164-160-11 | s CERAMIC, CHIP 20PF 5% 50V      |
| C827                | 1-164-218-11 | s CERAMIC, CHIP 180PF 50V        |
| C828                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C829                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C830                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C831                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C832                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C833                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C834                | 1-162-915-11 | s CERAMIC, CHIP 10PF 50V         |
| C835                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C836                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C837                | 1-162-927-11 | s CERAMIC, CHIP 100PF 5% 50V     |
| C838                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C839                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C840                | 1-126-933-11 | s ELECT 100uF 20% 16V            |
| C841                | 1-162-924-11 | s CERAMIC 56PF 5% 50V            |
| C844                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C845                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C846                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V      |
| C847                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C848                | 1-126-947-11 | s ELECT 47uF 20% 35V             |
| C849                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V  |
| C850                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V      |
| C851                | 1-163-125-00 | s CERAMIC, CHIP 220PF 5% 50V     |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| C852                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C853                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C854                | 1-162-924-11 | s CERAMIC 56PF 5% 50V           |
| C855                | 1-162-924-11 | s CERAMIC 56PF 5% 50V           |
| C856                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C857                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C859                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C860                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C861                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C862                | 1-162-922-11 | s CERAMIC, CHIP 39PF 5% 50V     |
| C863                | 1-162-921-11 | s CERAMIC, CHIP 33PF 5% 50V     |
| C864                | 1-126-947-11 | s ELECT 47uF 20% 35V            |
| C865                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C866                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C951                | 1-162-919-11 | s CERAMIC, CHIP 22PF 5% 50V     |
| C952                | 1-164-217-11 | s CERAMIC, CHIP 150PF 5% 50V    |
| C953                | 1-164-227-11 | s CERAMIC, CHIP 0.022uF 10% 25V |
| C955                | 1-162-970-11 | s CERAMIC, CHIP 0.01uF 10% 25V  |
| C956                | 1-162-907-11 | s CERAMIC, CHIP 2PF 50V         |
| CN609               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CN610               | 1-573-782-21 | o CONNECTOR, PHEC 60P, MALE     |
| CV101               | 1-141-322-11 | s CAP, VAR, TRIMMER 20PF        |
| CV601               | 1-141-322-11 | s CAP, VAR, TRIMMER 20PF        |
| D101                | 8-719-104-10 | s DIODE 1SS99                   |
| D102                | 8-719-104-10 | s DIODE 1SS99                   |
| D103                | 8-719-104-10 | s DIODE 1SS99                   |
| D104                | 8-719-104-10 | s DIODE 1SS99                   |
| D105                | 8-719-104-10 | s DIODE 1SS99                   |
| D106                | 8-719-104-10 | s DIODE 1SS99                   |
| D107                | 8-719-941-86 | s DIODE DAN202U                 |
| D108                | 8-719-941-86 | s DIODE DAN202U                 |
| D110                | 8-719-911-19 | s DIODE 1SS119                  |
| D601                | 8-719-941-86 | s DIODE DAN202U                 |
| D602                | 8-719-911-19 | s DIODE 1SS119                  |
| D801                | 8-719-941-86 | s DIODE DAN202U                 |
| D802                | 8-719-800-76 | s DIODE 1SS226                  |
| D803                | 8-719-941-86 | s DIODE DAN202U                 |
| DL101               | 1-415-402-11 | s DELAY LINE 300ns              |
| DL103               | 1-415-402-11 | s DELAY LINE 300ns              |
| FL101               | 1-235-474-11 | s FILTER, LOW-PASS 2MHz         |
| FL102               | 1-236-040-11 | s FILTER, LOW-PASS 2.5MHz       |
| FL103               | 1-235-474-11 | s FILTER, LOW-PASS 2MHz         |
| FL104               | 1-409-410-11 | s FILTER, TRAP 4.4MHz           |
| FL801               | 1-235-759-11 | s FILTER, LOW-PASS 5MHz         |
| FL802               | 1-235-161-00 | s FILTER, BANDPASS 3.58MHz      |
| IC101               | 8-759-710-86 | s IC NJM2233BM                  |
| IC102               | 8-759-925-60 | s IC BA401                      |
| IC103               | 8-759-925-60 | s IC BA401                      |
| IC104               | 8-752-015-81 | s IC CX20158                    |
| IC105               | 8-759-710-86 | s IC NJM2233BM                  |
| IC106               | 8-759-925-60 | s IC BA401                      |
| IC107               | 8-752-015-81 | s IC CX20158                    |
| IC108               | 8-752-015-81 | s IC CX20158                    |
| IC109               | 8-759-111-69 | s IC UPC1037HA                  |
| IC110               | 8-759-710-86 | s IC NJM2233BM                  |
| IC111               | 8-759-925-60 | s IC BA401                      |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description         |
|---------------------|--------------|------------------------|
| IC112               | 8-752-015-81 | s IC CX20158           |
| IC113               | 8-759-300-71 | s IC HD14053BFP        |
| IC114               | 8-752-015-81 | s IC CX20158           |
| IC115               | 8-759-201-47 | s IC TA7357AP          |
| IC116               | 8-759-710-86 | s IC NJM2233BM         |
| IC117               | 8-759-927-46 | s IC SN74HC00NS        |
| IC600               | 8-741-126-20 | s IC BX1262            |
| IC601               | 8-759-710-86 | s IC NJM2233BM         |
| IC602               | 8-759-009-51 | s IC MC14538BF         |
| IC603               | 8-759-710-86 | s IC NJM2233BM         |
| IC801               | 8-759-014-29 | s IC MC34184M          |
| IC802               | 8-759-908-17 | s IC TL082CPS          |
| IC803               | 8-759-947-82 | s IC TL610CPS          |
| IC804               | 8-752-015-81 | s IC CX20158           |
| IC805               | 8-759-239-55 | s IC TC74HC123AF       |
| IC806               | 8-759-937-61 | s IC S-81230AG         |
| IC807               | 8-759-941-79 | s IC S-80230AG         |
| IC808               | 8-759-925-74 | s IC TC74HC04NS        |
| IC809               | 8-759-030-55 | s IC MC1496M           |
| IC951               | 8-759-925-97 | s IC SN74HC86ANS       |
| L101                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L102                | 1-410-087-31 | s INDUCTOR 10mH        |
| L103                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L104                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L107                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L108                | 1-410-656-11 | s INDUCTOR CHIP 150uH  |
| L109                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L110                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L111                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L112                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L113                | 1-410-388-31 | s INDUCTOR CHIP 39uH   |
| L114                | 1-410-391-11 | s INDUCTOR, CHIP 68uH  |
| L115                | 1-410-387-11 | s INDUCTOR, CHIP 33uH  |
| L118                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L119                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L120                | 1-410-390-11 | s INDUCTOR, CHIP 56uH  |
| L122                | 1-410-087-31 | s INDUCTOR 10mH        |
| L123                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L124                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L125                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L126                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L127                | 1-410-393-11 | s INDUCTOR CHIP 100uH  |
| L128                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L129                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L130                | 1-410-392-11 | s INDUCTOR, CHIP 82uH  |
| L131                | 1-412-282-41 | s INDUCTOR, CHIP 470uH |
| L132                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L133                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L136                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L140                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L141                | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L142                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L201                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L202                | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L506                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L600                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L601                | 1-408-785-21 | s INDUCTOR CHIP 47uH   |
| L602                | 1-410-381-11 | s INDUCTOR CHIP 10uH   |
| L603                | 1-410-392-11 | s INDUCTOR, CHIP 82uH  |

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| Ref. No.<br>or Q'ty | Part No.        | SP Description          |
|---------------------|-----------------|-------------------------|
| L604                | 1-412-282-41 s  | INDUCTOR, CHIP 470uH    |
| L605                | 1-412-282-41 s  | INDUCTOR, CHIP 470uH    |
| L606                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L801                | 1-410-381-11 s  | INDUCTOR CHIP 10uH      |
| L802                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L803                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L804                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L805                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L806                | 1-410-380-31 s  | INDUCTOR, CHIP 8.2uH    |
| L807                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L808                | 1-410-380-31 s  | INDUCTOR, CHIP 8.2uH    |
| L809                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L810                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L811                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L812                | 1-410-391-11 s  | INDUCTOR, CHIP 68uH     |
| L813                | 1-410-386-11 s  | INDUCTOR, CHIP 27uH     |
| L814                | 1-410-392-11 s  | INDUCTOR, CHIP 82uH     |
| L815                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L816                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L817                | 1-410-381-11 s  | INDUCTOR CHIP 10uH      |
| L818                | 1-410-393-11 s  | INDUCTOR CHIP 100uH     |
| L951                | 1-408-785-21 s  | INDUCTOR CHIP 47uH      |
| L952                | 1-410-385-41 s  | INDUCTOR CHIP 22uH      |
| L953                | 1-410-387-11 s  | INDUCTOR, CHIP 33uH     |
| LV600               | 1-408-514-11 s  | COIL (VARIABLE)         |
| LV601               | 1-408-514-11 s  | COIL (VARIABLE)         |
| PS801               | A1-532-605-00 s | LINK, IC 0.4A           |
| Q101                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q102                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q103                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q104                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q105                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q106                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q107                | 8-729-905-18 s  | TRANSISTOR DTC144EU     |
| Q111                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q112                | 8-729-905-18 s  | TRANSISTOR DTC144EU     |
| Q113                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q114                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q115                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q116                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q117                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q118                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q119                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q120                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q121                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q122                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q123                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q124                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q125                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q126                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q127                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q129                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q130                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q131                | 8-729-120-28 s  | TRANSISTOR 2SC1623-L5L6 |
| Q132                | 8-729-905-24 s  | TRANSISTOR 2SA1576-S    |
| Q133                | 8-729-905-24 s  | TRANSISTOR 2SA1576-S    |
| Q134                | 8-729-905-24 s  | TRANSISTOR 2SA1576-S    |

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| Ref. No.<br>or Q'ty | Part No.       | SP Description          |
|---------------------|----------------|-------------------------|
| Q135                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q136                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q138                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q139                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q141                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q142                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q143                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q144                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q145                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q146                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q147                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q148                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q149                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q151                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q152                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q153                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q154                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q155                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q156                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q157                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q158                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q159                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q160                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q161                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q162                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q163                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q164                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q165                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q170                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q171                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q172                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q173                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q174                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q175                | 8-729-119-77 s | TRANSISTOR 2SA1175-FEK  |
| Q176                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q177                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q178                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q179                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q180                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q201                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q202                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q203                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q204                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q600                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q601                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q602                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q603                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q604                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q605                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q606                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q607                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q608                | 8-729-905-18 s | TRANSISTOR DTC144EU     |
| Q609                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q610                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q611                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q612                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q613                | 8-729-905-24 s | TRANSISTOR 2SA1576-S    |
| Q801                | 8-729-120-28 s | TRANSISTOR 2SC1623-L5L6 |
| Q802                | 8-729-201-27 s | TRANSISTOR 2SC2715-Y    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| Q803                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q804                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q805                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q806                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q807                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q808                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q809                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q810                | 8-729-122-63 | s TRANSISTOR 2SA1226           |
| Q811                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q812                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q813                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q814                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q815                | 8-729-201-27 | s TRANSISTOR 2SC2715-Y         |
| Q816                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q817                | 8-729-216-22 | s TRANSISTOR 2SA1162           |
| Q818                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q819                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q951                | 8-729-216-22 | s TRANSISTOR 2SA1162           |
| Q952                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| Q953                | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
| R101                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R103                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R104                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R105                | 1-218-313-11 | s METAL, CHIP 560 1% 1/16W     |
| R107                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R108                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R109                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R110                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R111                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W    |
| R112                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R113                | 1-216-802-11 | s METAL, CHIP 27 5% 1/16W      |
| R114                | 1-218-313-11 | s METAL, CHIP 560 1% 1/16W     |
| R115                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W     |
| R116                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W    |
| R117                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R118                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R119                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R120                | 1-218-313-11 | s METAL, CHIP 560 1% 1/16W     |
| R121                | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| R122                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R123                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| R124                | 1-218-828-11 | s METAL, CHIP 160 0.50% 1/16W  |
| R125                | 1-218-680-11 | s METAL, CHIP 330 0.50% 1/16W  |
| R128                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W    |
| R129                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| R130                | 1-218-271-11 | s METAL, CHIP 2K 5% 1/16W      |
| R131                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R132                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R133                | 1-218-698-11 | s METAL, CHIP 1.8K 0.50% 1/16W |
| R134                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R135                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| R136                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W     |
| R137                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| R138                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R139                | 1-218-720-11 | s METAL, CHIP 15K 0.50% 1/16W  |
| R140                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W    |
| R141                | 1-218-708-11 | s METAL, CHIP 4.7K 0.50% 1/16W |
| R142                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| R143                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |

## (VA-111AP BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                |
|---------------------|--------------|-------------------------------|
| R144                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R145                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R146                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W   |
| R147                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R148                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R149                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R150                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R151                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R152                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R153                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R155                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W     |
| R156                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R158                | 1-216-834-11 | s METAL, CHIP 12K 5% 1/16W    |
| R159                | 1-216-832-11 | s METAL, CHIP 8.2K 5% 1/16W   |
| R160                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R161                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R164                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R167                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R168                | 1-218-668-11 | s METAL, CHIP 100 0.50% 1/16W |
| R169                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W   |
| R170                | 1-216-822-11 | s METAL, CHIP 1.2K 5% 1/16W   |
| R171                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R172                | 1-216-865-11 | s METAL, CHIP 3K 5% 1/16W     |
| R173                | 1-216-815-11 | s METAL, CHIP 330 5% 1/16W    |
| R174                | 1-218-688-11 | s METAL, CHIP 680 0.50% 1/16W |
| R175                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R176                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R177                | 1-216-830-11 | s METAL, CHIP 5.6K 5% 1/16W   |
| R178                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R179                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R180                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R181                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R182                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R183                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R185                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W     |
| R186                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R187                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R188                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R189                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R190                | 1-216-809-11 | s METAL, CHIP 100 5% 1/16W    |
| R192                | 1-218-285-11 | s METAL, CHIP 75 5% 1/16W     |
| R193                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R194                | 1-216-835-11 | s METAL, CHIP 15K 5% 1/16W    |
| R195                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |
| R196                | 1-216-826-11 | s METAL, CHIP 2.7K 5% 1/16W   |
| R198                | 1-216-820-11 | s METAL, CHIP 820 5% 1/16W    |
| R199                | 1-216-833-11 | s METAL, CHIP 10K 5% 1/16W    |
| R200                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R201                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R202                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R203                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R204                | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W    |
| R205                | 1-216-805-11 | s METAL, CHIP 47 5% 1/16W     |
| R206                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R207                | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W     |
| R208                | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W   |
| R209                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R210                | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W    |
| R211                | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W   |



## RA-4P BOARD)

| Ref. No.<br>Q'ty | Part No.     | SP Description                 |
|------------------|--------------|--------------------------------|
|                  | 8-719-400-18 | s DIODE MA152WK                |
| 1                | 8-752-033-00 | s IC CXA1234AR                 |
| 3                | 8-759-230-99 | s IC TC74HC4053AF              |
| 4                | 8-759-230-99 | s IC TC74HC4053AF              |
| 5                | 8-759-701-75 | s IC NJM7805FA                 |
| 6                | 8-759-700-65 | s IC NJM79L05A                 |
|                  | 1-410-478-11 | s INDUCTOR 47uH                |
|                  | 1-408-423-00 | s INDUCTOR 150uH               |
|                  | 1-408-785-21 | s INDUCTOR CHIP 47uH           |
|                  | 1-410-376-21 | s INDUCTOR, CHIP 3.9uH         |
|                  | 1-408-785-21 | s INDUCTOR CHIP 47uH           |
|                  | 1-410-381-11 | s INDUCTOR CHIP 10uH           |
|                  | 1-408-785-21 | s INDUCTOR CHIP 47uH           |
|                  | 1-408-785-21 | s INDUCTOR CHIP 47uH           |
|                  | 1-408-777-00 | s INDUCTOR, CHIP 10uH          |
| 0                | 1-408-777-00 | s INDUCTOR, CHIP 10uH          |
|                  | 8-729-905-18 | s TRANSISTOR DTC144EU          |
|                  | 8-729-216-22 | s TRANSISTOR 2SA1162           |
|                  | 8-729-120-28 | s TRANSISTOR 2SC1623-L5L6      |
|                  | 8-729-103-19 | s TRANSISTOR 2SA1206-K1        |
|                  | 8-729-216-22 | s TRANSISTOR 2SA1162           |
|                  | 8-729-905-18 | s TRANSISTOR DTC144EU          |
|                  | 8-729-905-18 | s TRANSISTOR DTC144EU          |
|                  | 8-729-216-22 | s TRANSISTOR 2SA1162           |
|                  | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
|                  | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
|                  | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
|                  | 1-216-829-11 | s METAL, CHIP 4.7K 5% 1/16W    |
|                  | 1-216-824-11 | s METAL, CHIP 1.8K 5% 1/16W    |
|                  | 1-216-824-11 | s METAL, CHIP 1.8K 5% 1/16W    |
|                  | 1-218-698-11 | s METAL, CHIP 1.8K 0.50% 1/16W |
|                  | 1-218-698-11 | s METAL, CHIP 1.8K 0.50% 1/16W |
|                  | 1-218-720-11 | s METAL, CHIP 15K 0.50% 1/16W  |
| 0                | 1-216-838-11 | s METAL, CHIP 27K 5% 1/16W     |
| 11               | 1-218-720-11 | s METAL, CHIP 15K 0.50% 1/16W  |
| 12               | 1-218-725-11 | s METAL, CHIP 24K 0.50% 1/16W  |
| 13               | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| 14               | 1-216-839-11 | s METAL, CHIP 33K 5% 1/16W     |
| 19               | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| 20               | 1-216-817-11 | s METAL, CHIP 470 5% 1/16W     |
| 21               | 1-216-824-11 | s METAL, CHIP 1.8K 5% 1/16W    |
| 22               | 1-216-795-11 | s METAL, CHIP 6.8K 0.50% 1/16W |
| 23               | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W      |
| 24               | 1-216-818-11 | s METAL, CHIP 560 5% 1/16W     |
| 25               | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| 26               | 1-216-825-11 | s METAL, CHIP 2.2K 5% 1/16W    |
| 28               | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| 29               | 1-216-841-11 | s METAL, CHIP 47K 5% 1/16W     |
| 30               | 1-216-837-11 | s METAL, CHIP 22K 5% 1/16W     |
| 31               | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W      |
| 32               | 1-216-797-11 | s METAL, CHIP 10 5% 1/16W      |
| 33               | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| 34               | 1-216-821-11 | s METAL, CHIP 1K 5% 1/16W      |
| 35               | 1-216-843-11 | s METAL, CHIP 68K 5% 1/16W     |
| 36               | 1-216-827-11 | s METAL, CHIP 3.3K 5% 1/16W    |
| 37               | 1-216-864-11 | s METAL, CHIP 0 5% 1/16W       |
| 39               | 1-218-744-11 | s METAL, CHIP 150K 0.50% 1/16W |
| 40               | 1-218-744-11 | s METAL, CHIP 150K 0.50% 1/16W |

## (VRA-4P BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| R41                 | 1-218-700-11 | s METAL, CHIP 2.2K 0.50% 1/16W |
| R42                 | 1-218-700-11 | s METAL, CHIP 2.2K 0.50% 1/16W |
| R43                 | 1-216-801-11 | s METAL, CHIP 22 5% 1/16W      |
| R44                 | 1-216-789-11 | s METAL, CHIP 2.2 5% 1/16W     |
| R45                 | 1-216-789-11 | s METAL, CHIP 2.2 5% 1/16W     |
| RV1                 | 1-238-783-11 | s RES, ADJ, CERMET 500         |
| RV2                 | 1-238-786-11 | s RES, ADJ METAL 5K            |
| RV3                 | 1-238-786-11 | s RES, ADJ METAL 5K            |

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FRAME

| Ref. No.<br>or Q'ty | Part No.      | SP Description   |
|---------------------|---------------|--|
| 1pc                 | A-8260-641-A  | s DRUM ASSY (DGH-98A-R)  |
| 1pc                 | A-8260-642-A  | s DRUM ASSY, UPPER ROTARY (DGH-98-R)   |
| 1pc                 | A-7070-624-A  | o MOUNTED CIRCUIT BOARD,<br>FP-84 FLEXIBLE<br>(CN-551P/CN345 to MD ASSY/W801)  |
| 1pc                 | A-7070-625-A  | o MOUNTED CIRCUIT BOARD,<br>FP-122 FLEXIBLE<br>(CN-551P/CN344 to MD ASSY/W901) |
| 1pc                 | △1-413-820-11 | s SWITCHING REGULATOR (SOPS-1031)  |
| 1pc                 | 1-506-485-11  | s CONNECTOR (HOOK TYPE)<br>(to LM-22 BOARD)                                    |
| 1pc                 | 1-506-485-11  | s CONNECTOR (HOOK TYPE)<br>(to MS-36 BOARD)                                    |
| 1pc                 | △1-576-228-11 | s FUSE, H.B.C 2A 250V  |
| 1pc                 | 1-535-535-11  | s TERMINAL, SHAFT GROUND   |
| 1pc                 | 1-543-830-11  | o CLAMP, SLEEVE FERRITE  |
| CN3001              | △1-580-375-11 | S INLET 3P "AC IN"   |
| CS1001              | 1-806-682-00  | s SENSOR, CONDENSATION   |
| J1002               | 1-507-854-00  | s JACK, HEADPHONES   |
| M1002               | 8-835-304-11  | s MOTOR, DC (U-11B) "REEL"   |
| M1003               | 8-835-364-01  | s MOTOR, DC (BHF-2802B) "CAPSTAN"  |
| M1004               | X-3711-936-1  | s MOTOR ASSY, FL (DNR-6603A)<br>"CASSETTE COMPARTMENT"                         |
| M1005               | 8-835-138-01  | s MOTOR, DC (DNR-5301B) "CONTROL"  |
| M1006               | A-7040-065-A  | s MOTOR ASSY, L (DNR-6602A) "LOADING"  |
| ME1001              | 1-520-506-11  | s METER AUDIO LEVEL CH-1   |
| ME1002              | 1-520-506-11  | s METER AUDIO LEVEL CH-2   |
| PM1001              | 1-454-377-21  | s SOLENOID "BRAKE"   |
| PM1002              | 1-454-445-21  | s SOLENOID "CLEANING"  |
| S1001               | △1-570-117-41 | s SWITCH, ROCKER "POWER"   |
| S1002               | 1-570-407-11  | s SWITCH SLIDE "CASSETTE IN"   |
| S1003               | 1-553-226-00  | s SWITCH LEAF "CASSETTE DOWN"  |
| S1010               | 1-572-298-21  | s SWITCH, PUSH "REC PROOF/MPHG/ME/MP"  |

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HARNESS

| Ref. No.<br>or Q'ty | Part No.     | SP Description   |
|---------------------|--------------|--|
| 1pc                 | 1-630-923-11 | o FLEXIBLE BOARD, FP-206<br>(MD ASSY to RS-31/CN304)   |
| 5pcs                | 1-696-147-11 | s FLEXIBLE CARD WIRE 26P<br>(SST-2AP/CN311 THRU CN315)<br>to<br>(MB-356AP/CN130 THRU CN314)  |
| 1pc                 | 1-949-739-11 | o HARNESS (KY-DD1)<br>(KY-217/CN703 to DD-12/CN752)  |
| 1pc                 | 1-949-740-11 | o HARNESS (KY-DD2)<br>(KY-217/CN704 to DD-12/CN751)  |
| 1pc                 | 1-949-741-11 | o HARNESS (AU)<br>(AU-156AP/CN221,CN222)<br>to<br>(AA-57/CN205,CN208)  |
| 1pc                 | 1-949-742-11 | o HARNESS (MB)<br>(MB-356AP/CN119,CN121,CN122,<br>CN123,CN329)<br>to<br>(VR-122/CN245, VR-130/CN242,<br>MT-57A/CN802 & SW-466/CN244) |
| 1pc                 | 1-949-743-11 | o HARNESS (SW467)<br>(MB-356AP/CN124,CN135,CN136)<br>to<br>(SW-467P/CN246 THRU CN249<br>& SST-2AP/CN307)                             |
| 1pc                 | 1-949-748-11 | o HARNESS (SST)<br>(SST-2AP/CN322 THRU CN328)<br>to<br>(CN-551P/CN335 THRU CN340 & CN348)  |
| 1pc                 | 1-949-749-12 | o HARNESS (AA)<br>(AA-57/CN201 THRU CN204,CN206<br>CN206,CN207,CN209,CN210)<br>to<br>(CP-177/CN211 THRU CN218)                       |
| 1pc                 | 1-949-751-11 | o HARNESS (RM101)<br>(RM-101/CN241 to MB-356P/CN113)   |
| 1pc                 | 1-949-752-11 | o HARNESS (AU-MON)<br>(MB-356P/CN1145 to CP-176/CN231)   |
| 1pc                 | 1-949-753-11 | o HARNESS (DUB)<br>(MB-356P/CN115 to CP-176/CN232)   |
| 1pc                 | 1-949-755-12 | o HARNESS (MONITOR)<br>(MB-356P/CN117 to CP-176/CN234)   |
| 1pc                 | 1-949-756-12 | o HARNESS (S-V)<br>(MB-356P/CN118 to CP-176/CN235)   |
| 1pc                 | 1-949-757-11 | o HARNESS (RM-122)<br>(RM-122/CN252 to SST-2AP/CN316)  |
| 1pc                 | 1-949-758-11 | o HARNESS (VRA-SI)<br>(MB-356P/CN128 to VRA-4P/CN501)  |
| 1pc                 | 1-949-759-11 | o HARNESS (VRA-DC)<br>(MB-356P/CN129 to VRA-4P/CN503)  |
| 1pc                 | 1-949-760-11 | o HARNESS (PRE)<br>(MB-356P/CN127 to PRE-10P/CN511)  |

## HARNESS)

| ef. No.<br>r Q'ty | Part No.                      | SP Description  |
|-------------------|-------------------------------|---|
| pc                | 1-949-761-11                  | o HARNESS (SDW348)<br>(MB-356P/CN125 to SW-543/CN810)         |
| pc                | 1-949-762-11                  | o HARNESS (KY-SST)<br>(KY-217/CN701 to SST-2AP/CN329 )        |
| pc                | 1-949-763-11                  | o HARNESS (TR)<br>(CN-551P/CN346 to TR-72/CN351)              |
| N126              | (to MB-356AP)<br>1-562-256-00 | o HOUSING 6P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG 24-28 |
| N137              | (to MB-356P)<br>1-562-257-00  | o HOUSING 8P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG 24-28 |
| N242              | (to HP-52)<br>1-506-482-11    | s HOUSING 3P<br>1-563-088-11 o CONTACT, FEMALE AWG24-30       |
| N243              | (to SW-540)<br>1-562-148-11   | o HOUSING 3P<br>1-563-088-11 o CONTACT, FEMALE AWG24-30       |
| N261              | (to DC-57P)<br>1-562-259-00   | o HOUSING 12P<br>1-562-260-11 o CONTACT, IL-S FELAME AWG24-28 |
| N262              | (to DC-57P)<br>1-562-254-00   | o HOUSING 4P<br>1-562-260-11 o CONTACT, IL-S FELAME AWG24-28  |
| N263              | (to DC-57P)<br>1-562-256-00   | o HOUSING 6P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG24-28  |
| N264              | (to DC-57P)<br>1-562-257-00   | o HOUSING 8P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG24-28  |
| N265              | (to DC-57P)<br>1-562-258-00   | o HOUSING 10P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG24-28 |
| N309              | (to SST-2AP)<br>1-506-482-11  | s HOUSING 3P<br>1-563-088-11 o CONTACT, FEMALE AWG24-30       |
| N321              | (to SST-2AP)<br>1-562-258-00  | o HOUSING 10P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG24-28 |
| N331              | (to CN-551P)<br>1-562-147-11  | o HOUSING 2P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| N332              | (to CN-551P)<br>1-562-149-11  | o HOUSING 4P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| N333              | (to CN-551P)<br>1-562-150-11  | o HOUSING 5P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| N334              | (to CN-551P)<br>1-562-147-11  | o HOUSING 2P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| N341              | (to CN-551P)                  |   |

## (HARNESS)

| Ref. No.<br>or Q'ty | Part No.                                 | SP Description  |
|---------------------|--|---|
|                     | 1-562-149-11                             | o HOUSING 4P  |
|                     | 1-563-088-11                             | o CONTACT, FEMALE AWG 24-30                                   |
| CN342               | (to CN-551P)<br>1-562-149-11             | o HOUSING 4P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| CN347               | (to CN-551P)<br>1-562-147-11             | o HOUSING 2P<br>1-563-088-11 o CONTACT, FEMALE AWG 24-30      |
| CN702               | (to KY-217)<br>1-562-151-00              | o HOUSING 6P<br>1-564-026-00 s CONTACT, FEMALE AWG24-30       |
| CN706               | (to KY-217)<br>1-562-152-11              | o HOUSING 7P<br>1-564-026-00 s CONTACT, FEMALE AWG24-30       |
| CN766               | (to LP-52)<br>1-562-152-11               | o HOUSING 7P<br>1-564-026-00 s CONTACT, FEMALE AWG24-30       |
| CN901               | (to SWITCHING REGULATOR)<br>1-562-259-00 | o HOUSING 12P<br>1-562-260-11 o CONTACT, IL-S FEMALE AWG24-28 |
| CN902               | (to SWITCHING REGULATOR)<br>1-562-285-11 | o HOUSING 4P<br>1-562-210-11 o CONTACT, FEMALE AWG18-22       |
| CN911               | (to AC-121AP)<br>1-562-285-00            | o HOUSING 4P<br>1-562-210-11 o CONTACT, FEMALE AWG18-22       |
| CN912               | (to AC-121AP)<br>1-562-211-11            | o HOUSING 3P<br>1-562-210-11 o CONTACT, FEMALE AWG18-22       |
| CN2002              | (to SWITCHING REGULATOR)<br>1-562-254-00 | o HOUSING 4P<br>1-562-260-11 o CONTACT, IL-S FELAME AWG24-28  |

#### 14-4. PACKING MATERIALS AND ACCESSORIES

| Ref. No.<br>or Q'ty | Part No.      | SP Description              |
|---------------------|---------------|-----------------------------|
| 1pc                 | A1-590-910-11 | s CORD, POWER               |
| 1pc                 | 3-176-268-01  | o CUSHION (UPPER)           |
| 1pc                 | 3-176-269-01  | o CUSHION (LOWER)           |
| 1pc                 | 3-694-922-01  | o SHEET, PROTECTION         |
| 1pc                 | A3-754-736-12 | s MANUAL, INSTRUCTION (E,F) |
| 1pc                 | 3-754-736-42  | s MANUAL, INSTRUCTION (G,I) |
| 1pc                 | 8-883-112-29  | s V8-6CLHSP                 |

#### 14-5. OPTIONAL FIXTURES

| Ref. No.<br>or Q'ty | Part No.                           | SP Description                     |
|---------------------|------------------------------------|------------------------------------|
|                     | Y-2031-001-1                       | o CLEANING FLUID                   |
|                     | J-6080-824-A                       | o FWD, REV TAKE UP TORQUE CASSETTE |
|                     | J-6080-825-A                       | o MODE SELECTOR                    |
|                     | J-6080-826-A                       | o No.6 GUIDE LOCK SCREWDRIVER      |
|                     | J-6080-827-A                       | o DIAL TENSION GAUGE               |
|                     | J-6080-831-A                       | o TENSION MEASUREMENT REEL         |
|                     | J-6080-832-A                       | o TENSION MEASUREMENT REEL         |
|                     | J-6080-840-A                       | o SMALL ADJUSTMENT MIRROR          |
|                     | J-6080-883-A                       | o RF/SWP CONNECTOR                 |
|                     | J-6080-891-A                       | o TRACK SHIFT TOOL                 |
|                     | J-6257-460-A                       | o UPPER DRUM REPLACEMENT TOOL      |
|                     | J-6257-560-A                       | o S-TENSION ADJUSTMENT TOOL        |
|                     | J-6257-610-A                       | o No.10 GEAR PHASE TOOL            |
|                     | J-6268-660-A                       | o EX-311 (EXTENSION BOARD)         |
|                     | J-6269-000-A                       | o REC HEAD PB HARNESS              |
|                     | 3-703-375-06                       | o PARALLEL PIN                     |
|                     | 7-700-766-01                       | o HEXAGONAL SCREWDRIVER            |
|                     | 7-741-900-53                       | o WIPING CLOTH                     |
|                     | 8-967-992-17                       | o ALIGNMENT TAPE, WR2-3CS          |
|                     | 8-967-995-07                       | o ALIGNMENT TAPE, WR5-1CP          |
|                     | 8-967-995-17                       | o ALIGNMENT TAPE, WR5-6C           |
|                     | 8-967-995-18                       | o ALIGNMENT TAPE, WR5-7CE          |
|                     | 8-967-995-47                       | o ALIGNMENT TAPE, WR5-5CSP         |
|                     | 8-967-995-48                       | o ALIGNMENT TAPE, WR5-8CSE         |
|                     | 8-967-995-57                       | o ALIGNMENT TAPE, WR5-8CLE         |
|                     | COMMERCIALY SOLD<br>HEAD DEGAUSSER |                                    |